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Pathways to Effective Programs and Positive Outcomes

Formerly Achieving Outcomes: A Practitioner's Guide to Effective Prevention

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Substance Abuse and Mental Health Services Administration
Center for Substance Abuse Prevention
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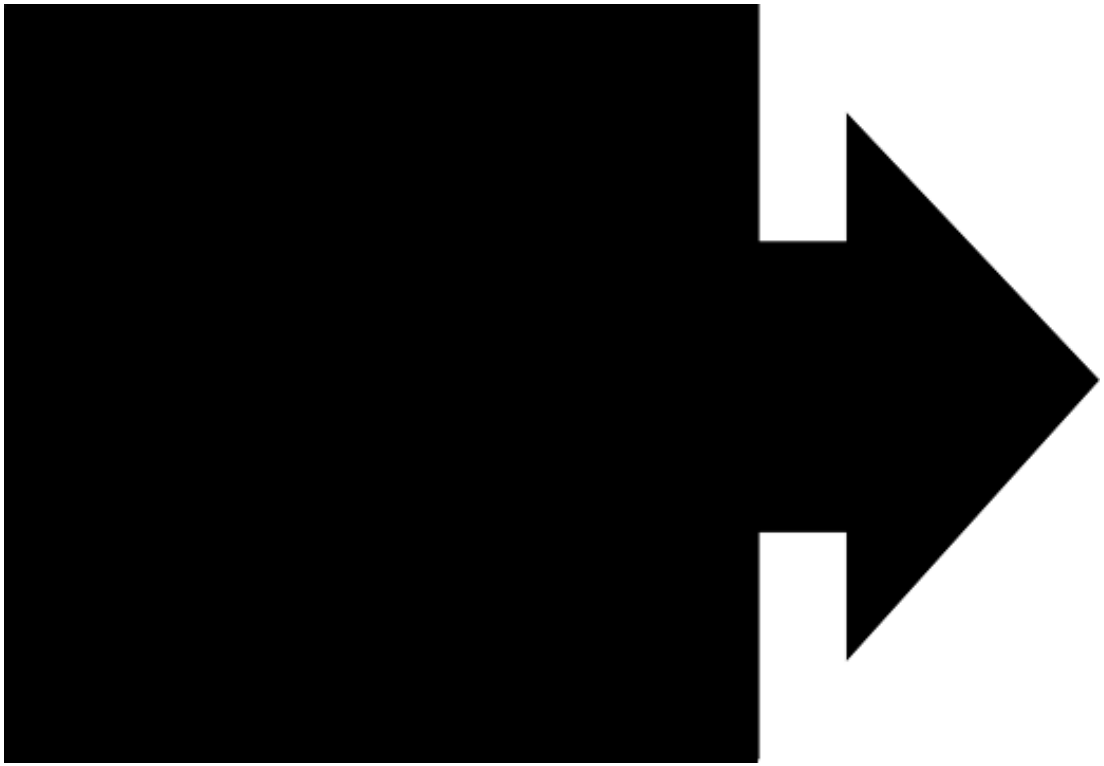
Pathways to Effective Programs and Positive Outcomes



This publication marks SAMHSA's commitment to bringing effective prevention to every community.

One of several in a new series of knowledge tools, *Pathways to Effective Programs and Positive Outcomes* presents a logical framework and practical process for achieving prevention outcomes. The process includes:

- determining needs, underlying conditions, resources, and gaps in prevention services;
- building organizational capacity;
- selecting best-fit programs and/or interventions;
- implementing the program(s) or intervention(s) using action plans and feedback; and
- creating an evaluation report.

Pathways is grounded in extensive collaboration between SAMHSA's CSAP and many of the constituent groups that make up the prevention field. Originated by acknowledged leaders from the evaluation community, then pilot tested with the Drug Free Communities grantees and made increasingly more customer-driven by representatives of CSAP's Centers for the Application of Prevention Technology (CAPTs) and successive groups of practitioners, this process is the product of the two major tenets it encourages—(1) evaluating continuously to create a "learning community" and (2) teaming to achieve results.

As SAMHSA's CSAP continues to identify and encourage effective prevention programs and practices and to provide capacity-building opportunities for States and communities, these knowledge tools will evolve in nature and content. Throughout this evolutionary process, SAMHSA's CSAP continues to collaborate with States, intermediary organizations, community practitioners, and coalition leaders to listen and learn about the challenges encountered in moving science to service and prevention service to prevention science. SAMHSA's CSAP is committed to integrating this feedback and developing new guidance to support the prevention field as it continues to grow and advance.

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Foreword

PATHWAYS presents a capacity-building framework and process for demonstrating and documenting outcomes.

Prevention works!

You know that. You also know that communities and funders want results. They want outcomes. Moreover, you want to demonstrate that your program(s)* work, that the changes taking place are meaningful for your organization or community and do justice to your efforts. The good news is that if you follow the process outlined in *PATHWAYS*, you are likely to see measurable outcomes. You will have empirical evidence that what you are doing is accomplishing what you intended.

PATHWAYS presents a capacity-building process for demonstrating and documenting outcomes. *PATHWAYS* was developed by SAMHSA's Center for Substance Abuse Prevention (CSAP) in response to requests from the prevention field for guidance on how community-based practitioners could better ensure and demonstrate their effectiveness.

PATHWAYS is the product of extensive collaboration between SAMHSA's CSAP and its constituent groups, particularly the Community Anti-Drug Coalitions of America (CADCA), the National Prevention Network (NPN), CSAP's regional Centers for the Application of Prevention Technologies (CAPTs), Drug Free Communities grantees, Weed and Seed partnerships, and the broader evaluation community. The process is user friendly and responsive to queries and concerns expressed by practitioners seeking demonstrated effectiveness.

**As used throughout this publication, the term "program" refers to the sum total of organized, structured interventions, including environmental initiatives, designed to change social, physical, fiscal, or policy conditions within a definable geographic area or for a defined population.*

It is not the purpose of this process to turn you into an expert evaluator.

Its purpose is to turn you into an educated consumer so that you can work confidently, comfortably, and credibly with anyone who can help you achieve and demonstrate your success.

PATHWAYS is a process—a way to think about how to make meaningful connections among people, neighborhoods, and interventions. The process is methodical and ongoing—from needs and resources assessment to capacity building; from the selection of a single program or comprehensive approach, including multiple sectors of the community over several domains, to implementation; final evaluation; and, when called for, back to needs and resources assessment again.

At every point there are procedures for measurement and evaluation. All points in the process are linked to one another and linked conceptually to the underlying factors and conditions that prompted your concern in the first place. Whether you will be using an evaluator intermittently or as a full-time team member, a conceptual understanding of the process will help you become a more informed consumer of evaluation services. You will have better control of program direction, a more productive evaluation experience, and a better chance of achieving success.

Why is this theory-driven, evidence-based process so important? A theory-based process, as advocated in *PATHWAYS*, will help you figure out what is working and why. It will keep your focus on authentic goals and objectives, enabling you to select appropriate interventions that—when properly implemented, measured, and evaluated—will lead to behavioral change and, ultimately, substance abuse prevention and/or reduction.

PATHWAYS is a process that is especially appropriate for coalitions. In this publication, coalitions can refer in a generic sense to groups of people working together to accomplish a mutually acceptable goal as well as, in a more formalized sense, to a partnership of social, political, health, faith, education, law enforcement, and other relevant organizations, as well as community stakeholders,* working together to advance substance abuse prevention and reduction within a community or geographic area. The process can maximize a community's resources by committing community stakeholders to a mutually agreed-upon, comprehensive community-wide prevention plan. Programs implemented in isolation of the

*The Office of National Drug Control Policy requires applicants for the Drug-Free Communities Grant Program to have representatives from each of the following categories: youth, parents, businesses, the media, schools, organizations serving youth, law enforcement, religious or fraternal organizations, civic and volunteer groups, health care professionals, State, local, or tribal governmental agencies with expertise in the field of substance abuse (including, if applicable, the State authority with primary authority for substance abuse), and other organizations involved in reducing substance abuse. If feasible, each coalition should also have an elected official (or representative of an elected official) from the Federal government and the government of the appropriate State and political subdivision.

greater community's needs may result in outcomes for a specific segment of the population, but are not likely to affect overall community substance abuse rates. Moreover, practitioners engaged in a collaborative effort are well positioned to maximize scarce resources and eliminate duplication. Sharing expertise and resources across the many sectors of the community can affect the norms and behaviors of neighborhoods, families, and individuals. Properly documenting and evaluating the results, in turn, will lead the coalition to a more robust impact.

PATHWAYS guides you through a comprehensive planning process that enables you to accurately assess your community's prevention needs as well as current prevention efforts. You will learn the steps necessary to select, implement, and evaluate programs that mobilize the community, provide effective prevention education and alternative activities for high-risk youth, inform the community of vital prevention messages, and provide assessment and referral for intervention and treatment services. You will learn how to determine which domains and particular risk and protective factors should be of most concern to your community.

In short, *PATHWAYS* will help ensure that what you are doing leads to measurable change. And if positive results are NOT forthcoming, *PATHWAYS* will help you identify why and what steps need to be taken to get back on the right path: the path to prevention.

PATHWAYS is divided into five chapters:

- Determine Needs and Resources
- Build Capacity
- Select/Adapt/Innovate Programs
- Implement and Assess Programs
- Complete an Evaluation

As you move through the process, you will be able to anchor your work conceptually with logic models and document it with action plans. Doing so will help you maintain focus and direction, document outcomes (immediate, intermediate, and long-term), and make adjustments as needed.

Following the *PATHWAYS* process is complicated at first. There are procedures within the process—notably needs and resources assessment and the measurement of outcomes—that require specialized training and expertise. For that reason, you may want to seek expert guidance from a knowledgeable and dependable consultant with whom you can work collaboratively to solve problems and improve outcomes.

It is not the purpose of this process to turn you into an expert evaluator. Its purpose is to support you as an educated consumer, so that you can work confidently, comfortably, and credibly with anyone who can help you achieve and demonstrate your success. *PATHWAYS* is real help for real people.

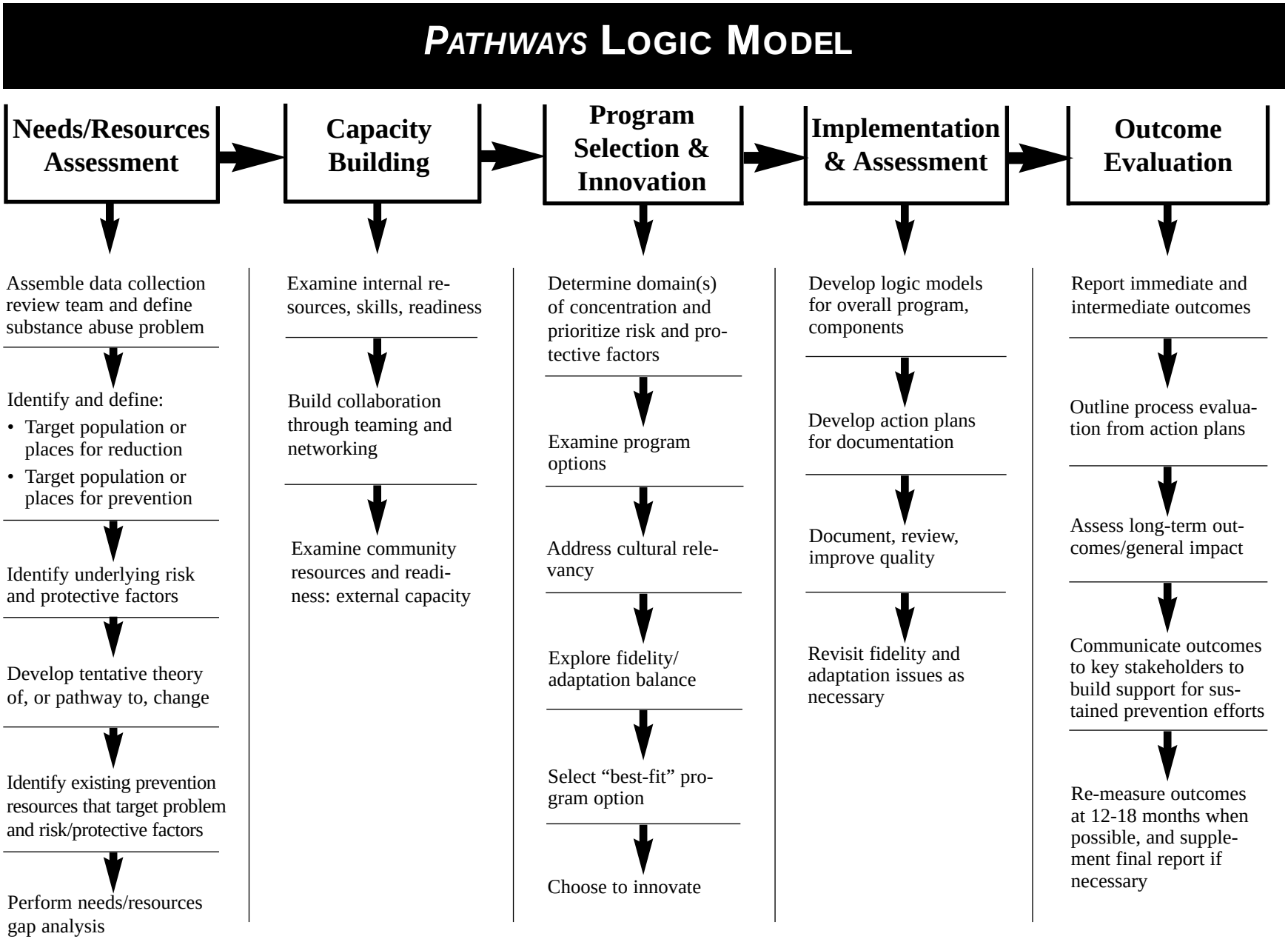
The lengthy development process for *Pathways to Effective Programs and Positive Outcomes*, which began in 1999 under another title, included an extensive review process that ultimately involved hundreds of experts and field practitioners, not only in the field of substance abuse prevention but in other disciplines as well. The purpose of this review process was to ensure that the *PATHWAYS* process and this document not only reflects the latest thinking on evidence-based process and practices, but also is presented in a manner that is practical, concise, and practitioner-friendly. In that sense, it is truly a "community" document, a process that has been vetted through tens of dozens of practitioners, evaluators, educators, and experts in the field. Thus, it represents the best that collaboration has to offer and serves as a model for all whose work might be guided by a collaborative process.

A Program Logic Model for *PATHWAYS*

PATHWAYS is organized conceptually around a *logic model*, as depicted on the following page. The components of the model are the five chapters of this publication: (1) Determine Needs and Resources, (2) Build Capacity, (3) Select/Adapt/Innovate Programs, (4) Implement and Assess Programs, and (5) Complete an Evaluation. As you organize your work, you, too, will use logic models to keep the process orderly and help you implement all of the required steps. It is likely that you will find it useful to create a logic model and an action plan—roadmaps of the work you are about to do—and charts of how you are planning to do the work, including space to document what was actually done. Sometimes, especially if you are a coalition, your work will have numerous components (e.g., a program for youth, a parent program, community mobilization, a media campaign, etc.), and you may decide to develop a logic model for each of the components. You will learn more about logic models and the action plans that support them in chapter 4.

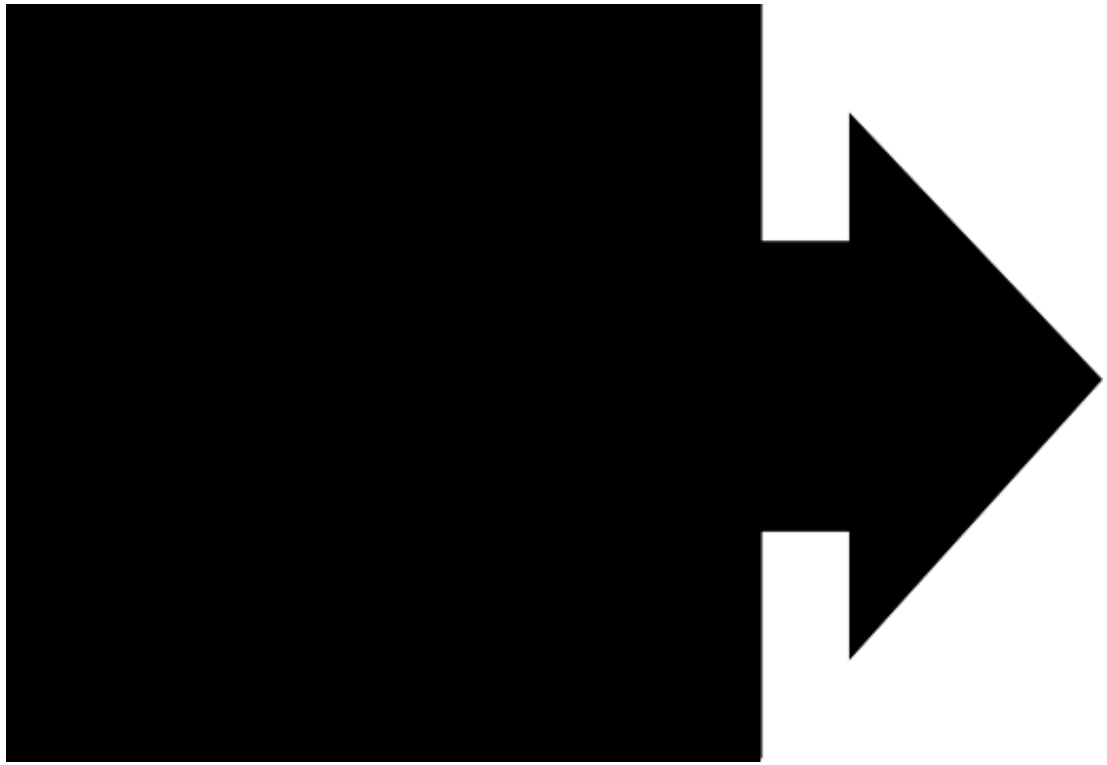
As a community prevention professional, you may be collaborating with other agency partners or serving as a partner in a coalition while also implementing direct prevention programs in one or more communities. In that case, a logic model captures the comprehensive prevention approach (multiple approaches across multiple domains) that will address your community's unique needs. Any given partner's logic model may fulfill one or more components of the community's overall prevention plan.

PATHWAYS Program Logic Model



Chapter 1

Determine Prevention Needs and Resources



Introduction

Why start with a formal assessment of prevention needs and resources in the community you serve when you may feel you already know what they are? Even if you and other substance abuse prevention practitioners and community specialists have a good understanding of the general substance abuse problem(s) in your community, a formal assessment is essential. You need to take an objective look at the full complement of community environmental, social, and individual risk and protective factors that are contributing to the problem, not just at the problem itself. This chapter will explain the importance of that assessment and how to go about it.

You will play a key role in developing this needs assessment, along with other team members and, if need be, an evaluator. These types of assessments may be new to you or broader in scope than those you have previously undertaken. The *PATHWAYS* process will assist you by providing practical information for identifying your "target" population(s) or environmental condition(s) and the *underlying factors* that create vulnerability to substance abuse and/or build upon the protective factors that mitigate the negative effects of risk.

It is very likely that your needs assessment will identify more than one target population that is at risk or already involved in substance abuse. Nonetheless, identifying the specific substance abuse problem(s) and specific at-risk populations will enable you and your partners to choose appropriate *programs**. Changing the pattern of risk and protection across an entire community will involve a number of programs, as it is highly unlikely that any one single program (or campaign or environmental approach) will address all of the substance abuse risk factors, or actual use rates, in a given community. Multiple approaches over multiple domains, effective programs, and systematic evaluations are key to achieving positive prevention/reduction *outcomes*.

Perhaps a specific population—or even a program —has been pre-determined for you or for one or more of your partners. This population may or may not reflect the population you (or your partner) would logically select from comprehensive needs and resources assessment, but it will be the one that the funder or host (e.g.,

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Needs and Resources Assessment

- Defines the nature and extent of substance abuse problems
- Identifies populations and/or neighborhoods statistically associated with the problem
- Identifies the underlying risk and protective factors of the identified population/group/ neighborhood
- Leads to a plausible theory (or theories) of change that, matched to the appropriate program(s), should reduce or prevent substance abuse

Federal agency, granting authority, school district) is most interested in serving. Reading this chapter will familiarize you with the needs and resources assessment process, either to identify the risk and protective factors for a population you have identified, or one that has been pre-determined for you, and to prepare for additional funding opportunities. This knowledge is important even if you have been given a program, as the program may need to be adapted to fit your population's specific risk and protective factors.

Finally, this chapter will outline how you can develop a *theory of change* or, possibly, several related theories of change that will anchor your implementation process to achievable outcomes and inform your selection of appropriate program(s), if that selection is yours to make. If you are not quite comfortable with the term "theory of change," it may help to think of it as a *pathway to change*. The important point is that the terms mean the same thing. Your *logic model*, which graphically depicts your theory of change, will guide you as you document your progress.

If you have been given or assigned a program, you may also have been given the program's theory of change (especially if it is a SAMHSA-designated model, effective, or promising program). Whether you have developed the theory, or been given the theory by a developer, it is important that you understand it. The logic model depicting the theory should help you pinpoint the specific outcomes that will lead you and your community to success and identify where an adaptation may be required in order to meet needs not yet identified.

Important Terms

Age of Onset: In substance abuse prevention, the age of first use.

Anecdotal Evidence: Information derived from a subjective report, observation, or example that may or may not be reliable, but cannot be considered scientifically valid or representative of a larger group or conditions in another location.

Archival Data: Relative to the collection of data for needs assessment purposes, information collected from existing records and maintained in some form.

Baseline Data: The initial information collected prior to the implementation of a program, against which outcomes can be compared at strategic points during, and at completion of, a program.

Coalition: A partnership of social, political, health, faith, education, law enforcement, and other relevant organizations, as well as community stakeholders, working together to advance substance abuse prevention and reduction within a community or geographic area. In a more generic sense, coalitions can refer to groups of people working together to accomplish a mutually acceptable goal

SAMHSA's Core Measures: As used in SAMHSA terminology, a compendium of data collection instruments that measure underlying conditions—risks, protective factors, attitudes, and behaviors of different populations—related to the prevention and/or reduction of substance abuse.

Domain: Sphere of activity or affiliation within which people live, work, and socialize (e.g., individual/peer, family, school, community).

Goal: The clearly stated, specific, measurable outcome(s) or change(s) that can be reasonably expected at the conclusion of a methodically selected program.

Incidence: A measure of the number of people (often in an identified population) who have *initiated* a behavior—in this case, drug, alcohol, or tobacco use—during a specific period of time.

Indicator: A substitute measure for a concept that is not directly observable or measurable (e.g., prejudice, substance abuse).

OUTCOMES:

The extent of change in targeted attitudes, values, behaviors, or conditions between baseline measurement and subsequent points of measurement. Depending on the nature of the program and the theory of, or pathway to, change guiding it, changes can be immediate, intermediate, and long-term outcomes.

PROGRAM:

As used throughout this publication, the term "program" refers to the sum total of organized, structured interventions, including environmental initiatives, that is designed to change social, physical, fiscal, or policy conditions within a definable geographic area or for a defined population.

Logic Model: A graphic depiction of the theory of (or pathway to) change that provides the underlying rationale for a program. It includes the approaches and activities that specifically address underlying needs and protective factors and specifies the expected immediate and intermediate outcomes, or objectives, and the expected long-term outcomes, or goals.

Objectives: As used in this publication, measurable statements of the expected change in risk and protective factors, or other underlying conditions as expressed in the program's guiding theory of, or pathway to, change.

Outcomes: The extent of change in targeted attitudes, values, behaviors, or conditions between baseline measurement and subsequent points of measurement. Depending on the nature of the program and the theory of, or pathway to, change guiding it, changes can be immediate, intermediate, and long-term outcomes.

Pathway to Change: See Theory of Change.

Prevalence: Rates/numbers of people using or abusing substances during a specified period, usually one year.

Program: As used throughout this publication, the term "program" refers to the sum total of organized, structured interventions, including environmental initiatives, designed to change social, physical, fiscal, or policy conditions within a definable geographic area or for a defined population.

Protective Factors: Conditions that build bonding to prosocial values and institutions and can serve to buffer the negative effects of risks.

Proxy Measures: In this publication, data that can be used as an indicator—an indirect measure of substance use or abuse. In general, multiple indirect measures (proxies) are more reliable than a single proxy.

Resources: Social, fiscal, recreational, and other community support that presently target substance abuse prevention and/or reduction.

Risk Factors: Conditions for a group, individual, or identified geographic area that increase the likelihood of a substance use/abuse problem.

Social Indicator: A measure of a social issue that has been tracked over time (e.g., family and community income, educational attainment, health status, community recreation facilities, per pupil expenditures, etc.) and can be used as a proxy measure.

Stakeholders: As used in this publication, all members of the community who have a vested interest (a stake) in

the activities or outcomes of a substance abuse program.

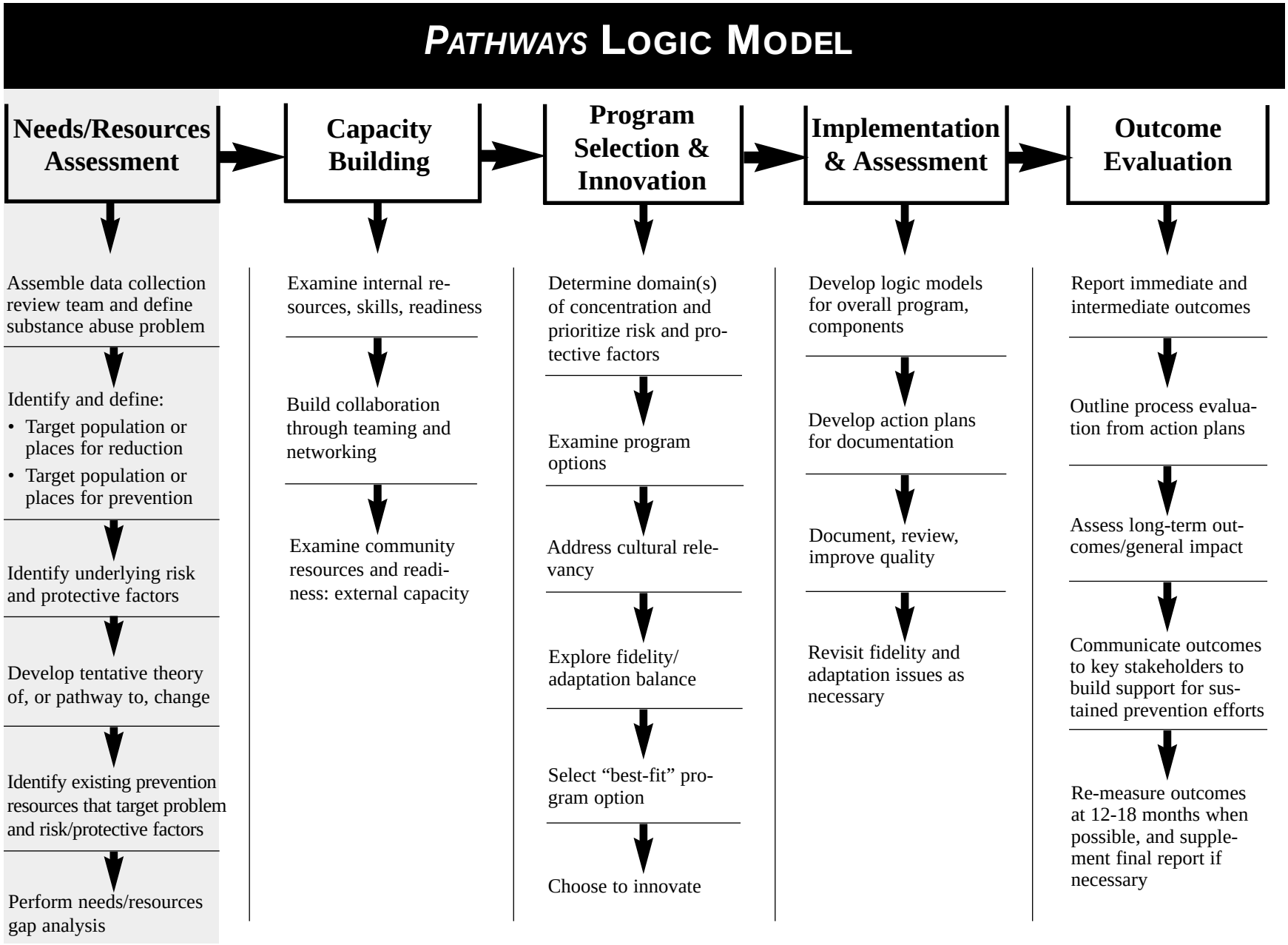
Survey Data: Information collected from specially designed instruments that provide data about the feelings, attitudes, and/or behaviors, usually of individuals.

Target Population: In this publication, the people whose attitudes, knowledge, skills, risk/protective factors, and behaviors are to be strengthened or changed. Also known in the field as the target group, the population of interest, or intended audience.

Theory of Change: As used in this publication, a set of related assumptions (also called hypotheses) about how and why desired change is most likely to occur as a result of a program. Typically, the theory of change is based on past research or existing theories of human behavior and development. Alternatively, a theory of change can be described as a pathway to change that systematically links actions to expectations or intended results.

Underlying Factors: Behaviors, attitudes, conditions, or events that cause, influence, or predispose an individual to resist or become involved in problem behavior, in this case, substance abuse. See *Risk Factors* and *Protective Factors*.

PATHWAYS Program Logic Model



Logic Model Discussion for Needs and Resources Assessment

Take another look at the overall program logic model for *PATHWAYS*, which is reproduced on the previous page. The shaded area shows how chapter 1, Determine Needs and Resources, fits into the overall process. The activities and tasks that make up the needs and resources assessment component of the *PATHWAYS* process are described below and on page 10. You will find more information about logic models and their role in chapter 4.

Determine Needs and Resources Action Steps

- **Assemble Data Collection Review Team and Define Substance Abuse Problem**
  - — Obtain baseline measures of substance abuse prevalence for groups or general population within geographic area of interest
  - — Obtain baseline measures of incidence (new cases)

- **Identify and Define Target Population/Places**
  - — To reduce use/abuse: Use successive layers of prevalence data (annual or 30-day use) to identify "who/what/where" is contributing most to the measures and indicators of use/abuse
  - — To delay (prevent) onset: Use incidence and prevalence data for common age of onset

  For pre-determined population:
  - — To reduce use/abuse: Obtain measures of prevalence within pre-determined population
  - — To delay onset:
    - Obtain measures of incidence within community corresponding to pre-determined population
    - Obtain measures of prevalence within pre-determined population to identify those already using

- **Identify Underlying Risk and Protective Factors**
  - — Establish assessment teams comprised of key stakeholders with access to, and understanding of, assessment data already available
  - — Use a variety of assessment data, including SAMHSA's core measures, community indicator data, and information from key stakeholders
  - — Analyze data to:
    - Set priorities for program selection, and
    - Select most appropriate baseline measures

- **Develop Tentative Theory of, or Pathway to, Change**
  - Review program and appropriate research literature
  - Ground initial theory of, or pathway to, change in research literature and assessment data

- **Identify Existing Prevention Resources that Target Problem and Risk/Protective Factors**
  - Conduct a resources assessment to determine which programs are currently available, who is offering them, and their quality
  - Consider how existing programs can be integrated into your prevention plan

- **Perform Needs/Resources Gap Analysis**
  - Evaluate existing resources for their fit with identified risk and protective factors
  - Understand that existing programs may still reflect service gaps

Conducting the Needs and Resources Assessment

The Importance of Needs and Resources Assessment to Achieving Positive Outcomes

A needs and resources assessment can identify the unique vulnerabilities and strengths that affect the substance abuse problem(s) in your community. You may have *anecdotal evidence* and perceptions about the overall nature of the substance abuse problem. However, until you gather data that show precisely what is happening, where it is happening, to whom, and why, your perceptions and anecdotal evidence may be only one piece of the reality. Since the needs and resources assessment can be time consuming and involves participation and collaboration with a number of local agencies, you may find the process much less cumbersome if you assemble a team to help collect data. Members of the team should include representatives of the agencies from which you will be collecting data, such as law enforcement, hospitals, and schools. *Coalitions* should have representatives from each of these agencies (see list on page viii of the Foreward of community representatives that the Office of National Drug Control Policy requires for applicants for the Drug Free Communities Grant Program) as part of the coalition member base and should readily call on them to assist in the data collection effort.

A needs and resources assessment has three primary goals: (1) understanding the nature and extent of the general substance abuse problem(s), (2) identifying the risk and protective factors that underlie the problem(s), and (3) documenting the existing resources that address the problem(s). Your ability to bring about positive change depends on your accurate understanding of the *underlying factors* that increase and decrease the risk for substance abuse among individuals. Neighborhoods and communities have risk as well. Abandoned property, poorly maintained parks, and empty stores on declining commercial strips are invitations to substance traffickers.

Substance use/abuse prevention programs (which, in this publication, refers to the sum total of organized, structured programs, including environmental initiatives, that is designed to change social, physical, fiscal, or policy conditions within a definable geographic area or for a defined population) have changed in recent years. Earlier programs focused almost exclusively on reducing *risk factors*; very few sought to enhance *protective factors*. (See figure 1.1 Examples of Risk and Protective Factors by Domain.) Today, programs also focus on identifying and developing protective factors that create and build bonding and can serve as a buffer against the negative effects of risk ("2002 annual report of science-based prevention programs and principles," SAMHSA's CSAP, 2002).

As you can see from the simplified chart, these risk and protective factors interact with each other within four *domains*:

- Individual/Peer
- Family
- School
- Community

These domains provide a framework for the evolving list of risk and protective factors that research indicates prevention programs should target. Coalitions address all of these domains through the "multiple approaches over multiple domains" philosophy that defines their work.

For a comprehensive picture of your community's substance abuse problem, keep in mind that:

1. ***Needs assessment*** can help pinpoint where or for whom prevention and/or reduction efforts will be most productive and identify the underlying risk factors that contribute to the vulnerability of the individual, group, or place of focus; and
2. ***Resources assessment*** focuses on community programming, funding, and other supports in each domain presently targeting substance abuse prevention and/or reduction.

The needs and resources assessment process discloses and quantifies the substance abuse problem in your community and your community's present response. These are many of your *baseline measures*, the initial information collected prior to an program. These particular baseline measures will help you formulate a

Figure 1.1 Examples of Risk and Protective Factors by Domain

Domain	Risk Factors	Protective Factors
Individual/Peer	• Early and persistent antisocial behavior • Friends who engage in the problem behavior • Favorable attitudes about the problem behavior • Early initiation of the problem behavior • Negative relationships with adults • Risk-taking propensity/impulsivity • Association with delinquent peers who use or value dangerous substances • Association with peers who reject mainstream activities and pursuits • Susceptibility to negative peer pressure • Easily influenced by peers	• Opportunities for prosocial involvement • Rewards/recognition for prosocial involvement • Healthy beliefs and clear standards for behavior • Positive sense of self • Negative attitudes about drugs • Positive relationships with adults • Association with peers who are involved in school, recreation, service, religion, or other organized activities • Resistance to peer pressure, especially negative • Not easily influenced by peers
Family	• Family history of high-risk behavior • Family management problems • Family conflict • Parental attitudes and involvement in the problem behavior	• Bonding (positive attachments) • Healthy beliefs and clear standards for behavior • High parental expectations • A sense of basic trust • Positive family dynamics
School	• Early and persistent antisocial behavior • Academic failure beginning in elementary school • Low commitment to school	• Opportunities for prosocial involvement • Rewards/recognition for prosocial involvement • Healthy beliefs and clear standards for behavior • Caring and support from teachers and staff • Positive instructional climate
Community	• Availability of drugs • Community laws, norms favorable toward drug use • Extreme economic and social deprivation • Transition and mobility • Low neighborhood attachment and community disorganization • Unemployment and underemployment • Discrimination • Pro-drug-use messages in the media	• Opportunities for participation as active members of the community • Decreasing substance accessibility • Cultural norms that set high expectations for youth • Social networks and support systems within the community • Media literacy (resistance to pro-use messages) • Increased pricing through taxation • Raised purchasing age and enforcement • Stricter driving-under-the-influence laws

Adapted from Brounstein, Zweig, and Gardner (1998). *Science-based practices in substance abuse prevention: A guide* and CSAP. *2002 annual report of science-based prevention programs and principles.*

"Drug abuse prevention often involves intervening early to promote healthy development in children and adolescents when the distinction between youths who will subsequently become drug abusers and those who will abstain is unknown. Because many of the young people targeted by prevention services have not yet started to use drugs, the level of need for prevention services cannot be determined simply by counting the number of substance users within the population. Instead, assessing the need for prevention services requires methods for assessing the probability of future drug use within populations that are not currently using substances, and assessing the resources available to reduce the probability."

From Arthur and Blitz, 2000

goal statement—the measurable change(s) that can be expected at the conclusion of your program. As you delve deeper, you will discover the risk and protective factors that will help you formulate your measurable objectives.

Most needs assessments begin with measures of the *incidence* and *prevalence* of substance abuse. (How and where to find data for these two measures will be explained later in this chapter.) These give you a general understanding of your community's drug problem. Incidence measures the number of people (often in a *target population*) who initiated alcohol, tobacco, or illicit drug use during the specified time period. Its special value to prevention practitioners is that when comparable data are available over time, they can be used to approximate age of first use, also called *age of onset*. This information is helpful for those who wish to focus their programs on a group that has not yet begun to experiment with drugs (e.g., primary prevention of substance use/abuse).

Prevalence measures the rate or total number of drug users in a group within a specified time period, regardless of when use was initiated. (Sometimes prevalence also measures frequency or level of use.) These data provide the standard for determining current drug use. Prevalence and incidence may reveal the general substance abuse issues, but do not usually give you enough direction about who and what are contributing to the problem.

For example, early age of onset of alcohol and drug experimentation among youth might appear to be a problem in your community. Once you verify that it is a problem, you still need to determine who and what are contributing to this problem. Examining only the prevalence of a particular problem (e.g., the number of youth currently using substances), will not help you decide what you can do to reduce and/or prevent the problem. If, on the other hand, you can determine which groups are most appropriate for prevention programs, and which are most appropriate for reduction programs, you will have made a good start. If you can then isolate which risk and protective factors best characterize your identified population(s), you can identify and implement programs to reduce those risks and build protection, thus preventing and/or reducing the problem behavior.

There are, indeed, circumstances in which a population has been identified or chosen for you, or is so obvious that a systematic search may be unnecessary. Many of the risk and protective factors may be known and generally acknowledged to be shared by the group as a whole. However, "knowing" these

factors does not negate the value of a formal needs assessment, especially because drug use is not uniform among groups who share common risk factors.

There are several reasons. First, the assessment will help identify the collateral needs of families and neighborhoods that will be useful to other coalition members. Second, while many of the general social and economic conditions contributing to substance use/abuse appear to be clear, the underlying factors, such as the risk and protective factors identified in Figure 1.1, for your defined population may still be unique and should be identified. Third, the needs assessment may provide the justification and guidance for adapting a program you are considering. For example, certain programs assume a skill level in participants. You may find that participants are missing some of the skills the program takes for granted, and you will have to adapt your approach. Finally, solid needs assessment data from your population are helpful if your outcomes from a replicated program fall short of expectations despite fidelity to the developer's design, as you will see in chapters 3 and 4.

Define the General Problem and Then Conduct a Multilayered Assessment

Much like peeling away the many layers of an onion to reach the core, successive levels of information about your community's substance abuse problem can be peeled away until you reach the core issues and underlying conditions. The actual process, as well as its importance to your success, is the same if you are an individual service provider, a partner in a coalition, one of several in a group of providers, or the lead agency for a coalition. For example, if you are an individual service provider, you may determine, as you examine your data, that substance use among young people in your community begins to spike in the seventh grade. This gives you important information about age of onset. When the next layer is peeled, you might then determine that this spike is more pronounced among young males in a particular school, neighborhood, or group.

You might also determine from key *stakeholders* (members of the community who have a vested interest in the activities or outcomes of a program, such as police or court officials who hope to see crime rates decrease, or real estate agents concerned about property values and vacancy rates, or business leaders interested in higher skill levels and reduced drug use among the workforce) that arrest rates for drug sales and possession are high in your community, indicating that availability of drugs is high. From still others (e.g., school guidance counselors), you might determine that truancy and academic failure rates are much higher among your group of youth than the average rates for comparable communities, or in the State as a whole. Guided by these clues, you can peel the next layer, looking more closely at individual data to identify and examine factors that make this population vulnerable to substance abuse.

It is important that you continue to peel away the layers of information until you reach the critical core. It is the critical core information that will allow you to identify the underlying risk and protective factors specific to your identified population or area of interest. This often includes data on individuals and may involve confidentiality issues. However, it is not unusual for community stakeholders to share individual-level needs assessment data for an identified population as a group, while withholding individual names.

Individual level data can also be gathered using SAMHSA's recommended *core measures*. This compendium of data collection instruments can provide practitioners with a means of identifying and measuring the individual risk/protective factors, attitudes, and behaviors within a group. While many of the core measures can be administered by practitioners without expert assistance, the administration and analysis of some of these instruments may require specialized help.

Your chances of getting down to the true core of data you need may increase if you work closely with partners. Collaborators can facilitate your access to critical data, help obtain data from particular sources, and help interpret the data you already have.

For example, perhaps you have only county-level data, but you want to know how the data break down by school. School officials may be reluctant to provide the data. However, if PTA officials make the request and provide legal and confidentiality assurances, school officials may agree to cooperate. And if a school official is an active member of your coalition, access to data not otherwise shared may be greatly enhanced.

Likewise, you may want to know how the data break down by neighborhood. A community planner may have access to this information by ZIP code, and a community leader from the area may be able to enhance your understanding of a particular population. If you can peel the layers down to the block level, you will be maximizing your potential for effectiveness, and the planner and community leaders may be more inclined to share data and expertise if they are official participants in a community coalition.

As an individual practitioner or as a coalition you will need to "peel the layers" within your geographic area of responsibility to help focus your organization or partners on where each can make a measurable difference and to ensure that each is contributing outcomes that, in turn, will contribute to measurable success.

Figure 1.2 reflects actual county needs assessment data obtained from a recent State needs assessment.. Incidence includes information about the number of people who have initiated a behavior—in this case, drug, alcohol, or tobacco use—during a specific period of time.. This information is often collect by student surveys; many such surveys are available free of charge from SAMHSA/CSAP. Thirty-day use (prevalence) more closely reflects the population of regular users. Note the increases between middle and high school. Note also the gender differences. Analysis of these charts would suggest that cigarette,

Figure 1.2 Sample State and County Needs Assessment Data Tool

Lifetime Use by Grade	County X			State			Ratio
Drug	**Middle 10-14**	**High 15-17**	**Total**	**Middle 10-14**	**High 15-17**	**Total**	**Incidence: County/State**
Alcohol	39.60	66.10	52.20	38.60	68.90	52.60	.99
Cigarettes	31.20	56.50	43.20	28.90	52.30	39.70	1.08
Inhalants	13.80	12.00	12.90	12.90	10.60	11.80	1.09
Marijuana	12.30	43.20	27.00	10.00	36.60	22.30	1.21
Cocaine	2.30	6.90	4.50	1.90	6.50	4.00	1.13

Lifetime Use by Gender	County X			State			County/State Ratio	
Drug	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**
Alcohol	52.20	51.60	51.90	52.80	52.40	52.60	0.98	0.98
Cigarettes	45.10	41.60	43.40	39.40	39.80	39.70	1.14	1.04
Inhalants	14.00	12.40	13.20	12.40	11.30	11.80	1.13	1.09
Marijuana	30.80	23.40	27.10	24.60	20.20	22.30	1.25	1.16
Cocaine	5.50	3.40	4.50	4.40	3.80	4.00	1.14	0.89

30-day Use by Grade	County X			State			Transition to High School	
Drug	**Middle 10-14**	**High 15-17**	**Total**	**Middle 10-14**	**High 15-17**	**Total**	**County X**	**State**
Alcohol	21.10	40.60	30.40	20.40	43.40	31.00	1.92	2.13
Cigarettes	13.10	26.20	19.30	9.80	21.70	15.30	2.00	2.21
Inhalants	6.90	3.60	5.30	5.70	3.20	4.60	.52	.56
Marijuana	6.90	22.40	14.30	5.10	18.30	11.20	3.24	3.59
Cocaine	1.20	2.50	1.80	.08	2.00	1.40	1.67	.25

30-day Use by Gender	County X			State			County/State Ratio	
Drug	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**
Alcohol	33.00	28.40	30.40	31.20	30.70	31.00	1.06	.93
Cigarettes	21.60	17.40	19.30	15.20	15.30	15.30	1.20	1.14
Inhalants	04.90	05.80	5.30	4.80	4.30	4.60	.11	1.16
Marijuana	19.40	10.00	14.30	13.00	9.60	11.20	1.49	1.04
Cocaine	03.00	.09	1.80	1.60	1.20	1.40	1.88	.08

From Florida Department of Children and Families, 2000.

Data Interpretation

1. Alcohol and cigarette use begins early, but cigarette use continues to surpass the Statewide averages through high school.

2. Marijuana use also begins early, escalates in high school, and is above the State average.

3. Early initiation of marijuana and inhalants is higher in County X than in the State and continues throughout high school.

4. Alcohol, cigarette, marijuana, inhalants, and cocaine use all begin early in County X.

5. Cigarette, marijuana, inhalants and cocaine use continue throughout high school, with use by both males and females exceeding State averages.

marijuana, inhalants, and cocaine use, beginning in middle school and accelerating in high school, are problems for County X. While this is more the case for boys than for girls, the prevalence for girls is also higher than the State average, with the exception of female cocaine use. Cocaine use is comparatively high for males, but the actual numbers are so small that addressing that issue may not be the best use of resources, if limited.

This example demonstrates how you can begin to define your population of interest (if the population was not pre-selected for you). Such charts and surveys can be difficult and confusing to analyze, and you should feel comfortable about seeking help if necessary.

Assessment tools such as this example can help identify the general substance abuse problem. But if you are operating at a local level, you will need to peel back more layers. The identification of early use of cigarettes, marijuana, inhalants, and, to a lesser extent, cocaine by middle and high school boys does not yet identify your target population within your community or, for that matter, within any single community within County X. Where are these students? Where do they live? What schools do they attend? This is the kind of necessary, detailed information that may not be available from *survey data* and that you may have to obtain, instead, from key stakeholders using structured interviews and focus groups.

Identify and Define a Population and/or Geographic Area

Your ability to bring about positive change depends on the extent to which you can accurately connect people and places with programs. For example, if your mandate or goal is to *reduce* substance abuse, you want to identify the precise group that is contributing most to the high numbers. Your programs should be targeted to that group. Otherwise your chance of actually reducing substance abuse in a specific community is compromised.

Once you have specified the population of interest, you can identify the risk and protective factors of the individuals who make up this population. You can then select programs that address their specific needs. (See chapters 3 and 4 for information on program selection and implementation.)

If, on the other hand, your mandate is to *prevent* substance abuse, you may want to identify the most common age of onset of substance abuse and focus your programmatic efforts on the age group directly below this age of onset. See case example B below.

As previously mentioned, it is not uncommon for an identified population to be pre-determined for a prevention program or coalition. This is the population you will need to serve to meet the requirements of your funder and/or local political environment. As the examples below illustrate, whether you select a population, or it is selected for you, your *goals* and *objectives* will relate to what can be accomplished within this identified population (reduction or prevention).

Example A: "REDUCTION in Substance Use and Abuse"

A county survey helped to identify marijuana use among youth in a small Midwestern town as a prevalent problem. Further assessment included local hospital and sheriff's data and key stakeholder interviews with the mayor and council and assistant middle and high school principals. This assessment identified a core group of adolescent boys at three middle schools as those primarily involved in this behavior. Additional assessment undertaken by school guidance staff revealed that these boys shared a range of risk factors: poor school performance, dysfunctional family life, and negative peer influences.

In response to these conditions, local prevention planners chose ***"reducing marijuana use and related behaviors among middle school children"*** *as a goal for a new project in their community. To succeed, the population responsible for the substance abuse (in this case, the core group of adolescent boys at three middle schools) would need to be specifically addressed. Successful outcomes would be achieved by selecting a program(s) that effectively address(ed) the underlying factors (e.g., poor school performance, dysfunctional family life, negative peer influences) that the school guidance counselors identified as characteristic of these boys' lives. Thus, planners tailored the objectives to meet the new project's goal by addressing the underlying factors (poor school performance, dysfunctional family life, etc.).*

Often prevention practitioners select "reduction of substance abuse" as a goal, but then fail to define the population responsible for the high rate of substance use, seriously jeopardizing goal attainment. Take care that you are not pressured to select outcomes that are incompatible with your needs assessment data (perhaps because you have been advised that grants are available for specific outcomes). Only after you have identified your population and assessed needs and resources can you look at funding streams and decide which are appropriate for your goals.

Example B: "PREVENTION of Substance Use and Abuse"

A needs assessment from a rural, largely Hispanic county revealed that the school dropout rate hovered around 40 percent. Many of the dropouts hung out near certain "hot spots" on the commercial strips. A local partnership, determined to make a difference, worked with a nearby college to develop a needs assessment plan that would allow the partnership to address two problems of acute concern: high rates of alcoholism, observable as well as corroborated by county health data, and school dropout rates 2.5 times the State norm.

A comprehensive needs assessment that began with the dropouts themselves revealed that many of the dropouts shared a risk factor of early initiation of alcohol use (typically at age 10). The families of these youth also complained of bicultural stress: that is, stress associated with living

in a culture different from their own. Further assessment revealed that many of these youth had younger siblings who were not yet using alcohol, but who were at high risk of doing so if family patterns persisted.

With much discussion and a review of needs assessment data, it was determined that there was a need to focus on the younger siblings.

Identify Underlying Risk and Protective Factors for Your Identified Population

The *archival data* you collect, which may be similar to that shown in figures 1.3 and 1.4, can provide guidance on where to begin your search for the risk and protective factors that are particular to your target population. Remember, however, that county-level, or even community-level, data may or may not be characteristic of this target population (assuming that county-level data are available). The further removed the data from your specific population, the greater the risk of a mismatch between your population or defined area and the selected program. The section on data collection in the second half of this chapter provides information on how to use different types of data to identify risk and protective factors for your identified population.

Figure 1.3 Example of a County Protective Factors Assessment

Domains	Protective Factors	County X	Like County	State
Community/Society	Community Rewards for Prosocial Involvement	47	47	48
Family	Family Attachment	51	52	51
	Family Opportunities for Prosocial Involvement	53	52	53
	Family Rewards for Prosocial Involvement	52	52	52
School	Opportunities for Prosocial Involvement	49	49	50
	Rewards for Prosocial Involvement	43	46	45
Individual/Peer	Religiosity	52	49	48
	Social Skills	54	53	53
	Belief in the Moral Order	53	55	53

From Florida Department of Children and Families, 2000.

Figure 1.4 Example of a County Risk Factor Assessment

Domains	Risk Factors	County X	Like County	State
Community/Society	Low Neighborhood Attachment	56	56	56
	Community Disorganization	49	51	53
	Personal Transitions and Mobility	60	60	59
	Community Transitions and Mobility	55	53	52
	Laws and Norms	45	44	43
	Perceived Availability	44	44	42
Family	Poor Family Supervision	52	50	50
	Poor Family Discipline	57	52	53
	Family History of Antisocial Behavior	48	50	47
	Parental Attitudes Favorable to Drug Use	46	47	46
	Parental Attitudes Favorable to Antisocial Behavior	47	48	48
School	Academic Failure	59	59	60
	Low School Commitment	54	52	51
Individual/Peer	Perceived Risks of Drug Use	38	40	39
	Early Initiation	52	49	49
	Impulsiveness	53	54	53
	Sensation Seeking	50	49	48
	Rebelliousness	44	43	43
	Friends' Delinquent Behavior	56	54	55
	Friends' Use of Drugs	50	49	47
	Peer Rewards for Antisocial Behavior	46	43	41
	Favorable Attitudes Toward Antisocial Behavior	40	37	37
	Favorable Attitudes Toward Drug Use	47	47	46

From Florida Department of Children and Families, 2000.

Develop a Tentative Theory of, or Pathway to, Change Grounded in Research Literature and Needs Assessment Data

The preceding examples show how needs assessment data can be used to inform decisions about how and to whom to address prevention and reduction efforts. The linkages you make between the information from your needs and resources assessment and your identified population will enable you to develop your *theory of change*, which enables you to identify meaningful, measurable goals and objectives.

Goals are simply the expected long-term, measurable outcomes of a prevention program. Goals should be achievable within the timeframe of the program. Reducing substance abuse for 15 percent of the high school youth identified as "users" in your community is an achievable goal; eliminating substance abuse altogether may not be. A community coalition might set a goal to significantly decrease the use of alcohol and drugs among 90 percent of the teens between the ages of 14 and 18 who are using alcohol and drugs, whereas a single service agency goal might be more limited in scope. A more limited goal might be to eliminate the use of tobacco products among the middle school youth who use tobacco products and who participate in one of three community boys and girls clubs.

A goal is comprised of a number of objectives. *Objectives* are the stepping stones to goal achievement. They are statements of the change(s) that you expect to occur in relation to the baseline measures of your identified population's risk and protective factors. This change is brought about by the particular components in your prevention program that address those particular risk and protective factors. Objectives are also known as immediate and intermediate outcomes.

Your goal is another way of stating your long-term outcomes, and your objectives are another way of stating the changes you expect to occur after each program component has been completed, if you are a single program, and the changes you expect from each of your partners if you are documenting the outcomes from a coalition. Collectively, goals and objectives specify and describe the changes you hope to accomplish through your prevention efforts.

Developing your theory of change is an instrumental part of establishing these goals and objectives. This begins upon completion of the analysis of your needs assessment data,, as you use the data to formulate

A **GOAL** is simply the long-term measureable outcomes of a preventio program. It can also be described as the long-term change in the baseline measure of the general substance abuse problem and the measure of that same problem when your program is completed.

OBJECTIVES are the immediate and intermediate outcomes you expect in the baseline measures of the risk and protective factors of your identified population after completion of the component that deals with those risk and protective factors.

The **THEORY OF CHANGE** is a set of related assumptions about how and why desired change is most likely to opccur as a result of a program. Alternatively, the theory of change can be described as a pathway to change.

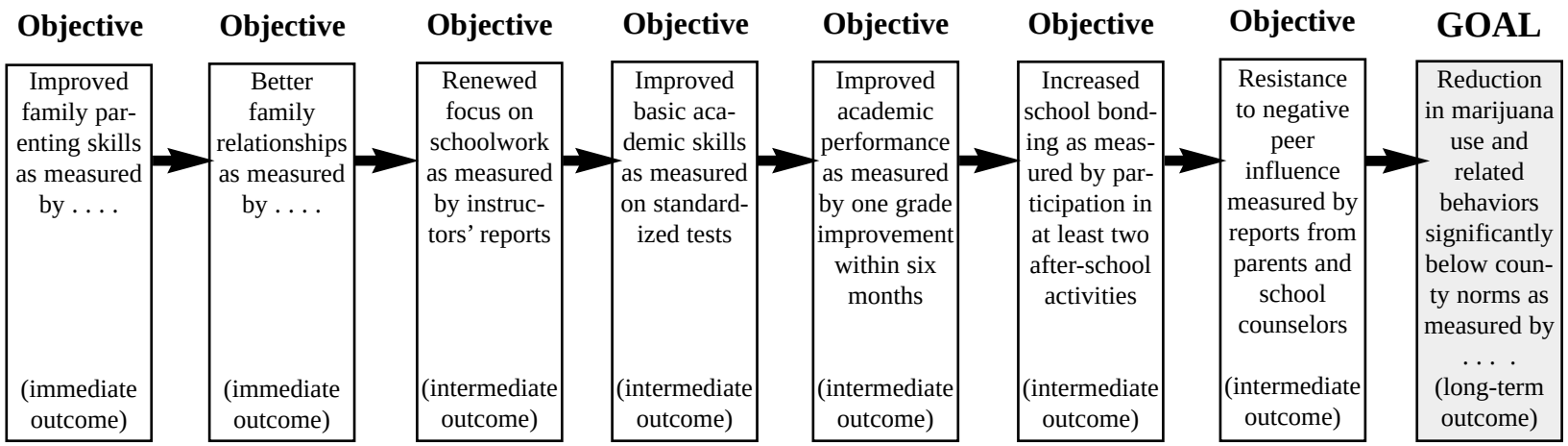
a set of assumptions (often referred to as hypotheses) about how and why desired changes are most likely to occur as a result of your effort. A review of the pertinent literature will help you articulate these assumptions. This important step is known as developing your theory, or theories, of change. (Later chapters will provide more detailed information to assist you in understanding the theory of, or pathway to, change as part of building a *logic model* for your program.)

To clarify further, in the previous Example A, "Reduction in Substance Use and Abuse," the goal, or long-term outcome, desired by the community is to "reduce marijuana use and related behaviors among middle school children." The objectives, which reflect the identified risk and protective factors, might be to improve school performance for the identified population, bolster family relationships and parenting skills, and reduce the impact of negative peer influences.

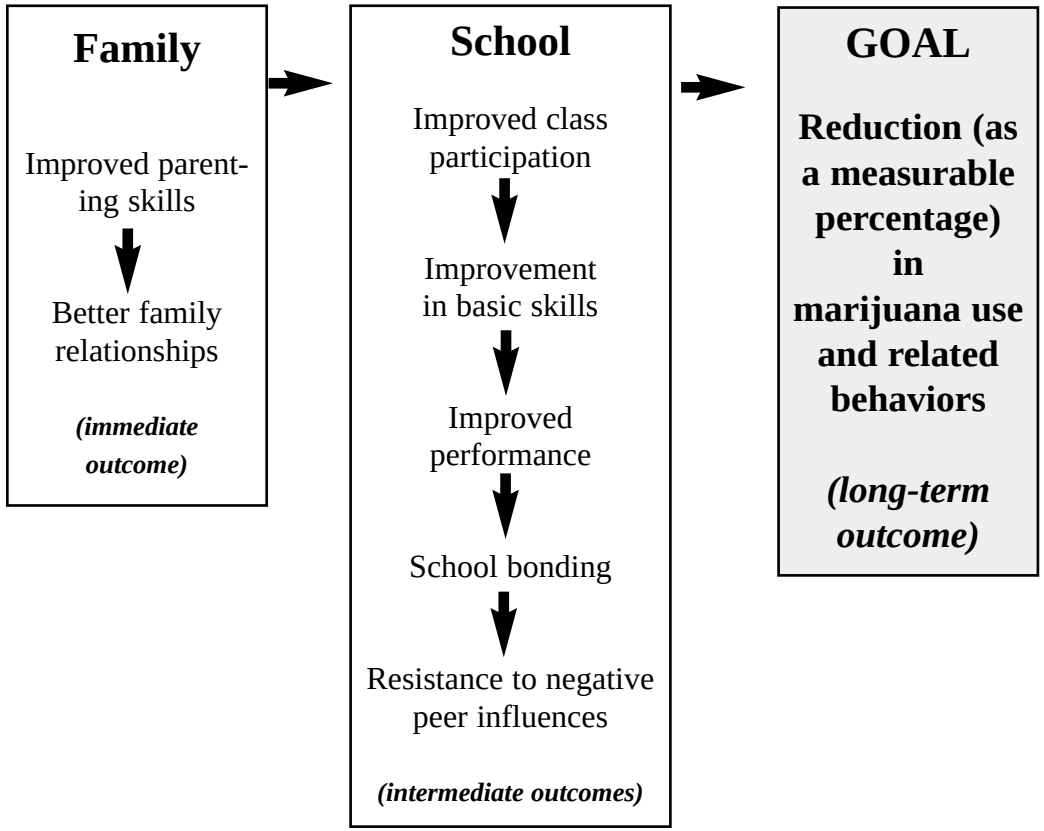
After reviewing the research literature relevant to this issue and population, your theory of, or pathway to, change to achieve the goal for this example might be stated in this way:

- **Improved family parenting skills (immediate outcome) lead to**
- **Better family relationships (immediate outcome), which lead to**
- **Renewed focus on schoolwork (intermediate outcome), which leads to**
- **Improved basic academic skills (intermediate outcome), which lead to**
- **Improved academic performance (intermediate outcome), which leads to**
- **Increased school bonding (intermediate outcome), which reduces**
- **The impact of negative peer influences (intermediate outcome), all of which leads to**
- **A reduction in marijuana use (long-term outcome).**

Graphically, the theory of change might look like this:



Or, the objectives could be grouped by domains and look like this instead:



The graphics shown above and on the previous page are an example of a logic model for a theory of, or pathway to, change in marijuana use. Logic models are a useful way to conceptually map the changes you hope to achieve, as will be explained further in chapter 4.

As you can already see, *PATHWAYS* depends in large part on the data you collect—the foundation on which you identify the substance abuse problem, identify the population, assess needs and resources, identify gaps, set your goals and objectives, and develop your theory of, or pathway, to change. At this point, however, you have only a tentative theory of change. Before you can proceed, you must first conduct a prevention resources assessment to identify if there are other programs and/or organizations addressing these same risk and protective factors for this same population. You want to both avoid duplication of efforts and maximize existing resources. A needs and resources gap analysis will help you identify the kinds of resources that are missing in your community and will be useful as your refine your theory of change to address a comprehensive prevention plan.

Identify Existing Prevention Resources

Once your team has analyzed local data and identified the target population's priority risk and protective factors, you will need to determine which of your community's existing resources are available or already engaged in addressing these same prevention issues. The last thing you want to do is to duplicate existing programs and services.

Moreover, if there are existing programs and/or services, the best approach is collaboration for coordinating current resources with new programs. As has been pointed out earlier in this chapter, a team approach to substance abuse prevention—the community coalition model—is usually preferable. Combining resources, skills, and political capital in a communitywide approach will result in the greatest chance for long-term impact and lasting success.

The list at right shows examples of resources that might be found in your community. Your resources assessment should identify which agency or organization is delivering the program, the target population, the program's objectives, the prevention approaches used, whether the program is evidence based and has been evaluated, frequency of program delivery, current level of funding support for the program, and the skills of those implementing the program. This information helps you understand not only which programs exist in your community but also the adequacy of these programs in meeting the needs you have identified.

You may find that existing programs are already targeting the same population(s) and risk and protective factors that your needs assessment has identified. As you develop a plan for addressing substance abuse in your community, consider how these existing resources fit into your overall approach. Integrate them into your collaborative effort. This is a perfect opportunity to think in terms of a coalition if you have not already done so. The whole is always greater (and more effective) than the sum of its parts.

Community Resources

- Number of community organizations providing emergency services (e.g., food, shelter) to families
- Number of community organizations providing services beyond the crisis situation to families (e.g., job placement, skills training, etc.)
- Number of faith-based organizations
- Number of resident volunteer neighborhood organizations and services
- Dollars available for prevention
- Participation at police/community council meetings
- Participation at community board meetings
- Number of afterschool recreational programs
- Number of alternative schools for youth
- Number of agencies willing to be involved in collaborative effort (i.e., new or existing coalitions)
- Number of juvenile court rehabilitation services
- Participation of parents in school meetings
- Number of agencies providing child care services
- Number of agencies providing parenting and family services
- Number of in- and out-patient substance abuse treatment facilities for parents and children
- Community norms, as measured by number of substance abuse-related hospital admissions
- Number of agencies offering family conflict resolution
- Number of family violence shelters and agencies
- Number of family program specialists
- Average number of child services agency contacts for home visitation to monitor serious problem situations

Perform Needs/Resources Gap Analysis

Now your needs and resources assessment team is ready to identify gaps in prevention services. This naturally follows your assessment of existing resources. Comparing your prioritized needs with the resources identified earlier will enable your team to determine what prevention service gaps exist in the community and how to craft a comprehensive prevention plan that builds on existing efforts and services and fills the gaps.

If you are a new coalition, you may find many more gaps than resources. Do not overlook the obvious, however. Police departments, social service agencies, the faith community, public and private schools, and other community organizations often have substance abuse prevention programs as part of their day-to-day operations. Often, the problem is that these programs were not selected and/or developed, for a variety of reasons, based on an accurate needs assessment of the target population(s). Thus, you may find that even if a number of programs and resources exist, there are still serious gaps in programs focused on the risk and protective factors identified by your needs assessment data.

You may also encounter a situation where an agency or organization is addressing the same population that your needs assessment has identified, but is doing so with an inadequate or ineffective program. Again, you will not want to duplicate services to this population without first attempting to collaborate with the service provider in question to maximize resources, funding, and effectiveness.

Data Collection and Effective Use

Data (e.g., collected from archival records and databases, surveys, interviews, focus groups, direct observation, and stakeholder input) establish the foundation for a multilayered assessment of prevention needs and resources. The following sections, addressed in this part of *PATHWAYS*, will help you understand the importance of finding and using data effectively:

- Identification of data
- Data specificity
- Data collection
- Data analysis
- Use expert guidance when needed
- Ongoing assessment

Identification of Data

You can find information about substance use/abuse behaviors and the underlying risk and protective factors and conditions that contribute to the problems from a variety of data. If you cannot pinpoint the information directly, you can use *indicators,* or *proxy measures* (substitute measures for a concept that is not directly observable), to determine how prevalent certain problems and other risk and protective factors may be in your community. Because the concepts are not directly observable, the use of several proxy measures will build a much more reliable indication of a concept than just a single proxy by itself.

Figure 1.5 suggests sample indicators, or proxies, for general family and community level risk. Research has shown these to be good proxy measures. For example, you cannot take a direct measure of how unhappy an individual might be. But you *can* measure the symptoms of unhappiness, such as short attention span, difficulty sleeping or sleeping too much, and general depression. Similarly, when you cannot measure a specific risk factor, you look for symptoms of the risk factor, as also demonstrated in Figure 1.5.

Risk Factors	Social Indicators (Proxy Measures)
Early and persistent antisocial behavior	• Elementary school emotional disturbance placement statistics • School incident reports • Juvenile arrest statistics
Family management problems	• Children living away from parents • Runaway statistics
Low commitment to school	• Percent of students who drop out • Truancy reports
Transitions and mobility	• Number of new homes constructed • Number of households in rental properties • Net migration of students in and out of schools

Figure 1.5
Sample of Selected Risk Factors and Associated Proxies

Social indicators are measures of social issues that have been tracked over time (e.g., family and community income, educational achievement, health status, per pupil education expenditures, etc.). Social indicators are often used to document levels of community and group risk and to serve as proxies for the existence of social problems, such as substance use/abuse. Sample community and family level indicators are shown in Figure 1.6.

Data fall into two broad categories:

Archival Data—This is information stored or archived on a periodic basis, and it is generally the simplest kind of data to gather. All types of agencies keep records and collect data—school districts, police departments, hospitals, health departments, etc. Often these data can be used directly or indirectly to establish an overall picture of substance abuse within the geographic area served by an agency.

When using archival data, always be careful to check how current it is. Often there is a considerable delay in updating databases. If things have changed in your community recently, they might not be reflected in your community's archival data. Since you need to use current data to develop an accurate picture of the problems in your community or for your targeted population, be certain you are not using old data as you conduct your needs and resources assessment.

Survey Data—This is information gathered from specially designed survey instruments that provide data about the feelings, attitudes, and/or behaviors of individuals within specific populations. Collection of these data can yield valuable and detailed evidence about the substance use/abuse behavior(s) and risk and protective factors for groups of people (as inFigures 1.4 through 1.6), and, therefore, what they may be for your identified population. You will then have to collect more detailed information to pinpoint the specific risk and protective factors for your population.

Survey data can be collected in a variety of ways: paper and pencil questionnaires, telephone or face-to-face interviews, and checklists. You may need to collect survey data from persons who represent otherwise hard-to-access individuals or populations (proxies). You can also collect survey data through key stakeholders, who can provide information about the behavior and characteristics of the individuals under study or linkages to other individuals and agencies that have this information.

Figure 1.6 Sample Social, Community, and Family Indicators

Risk Factors	Social Indicators (Proxy Measures)	Resources
Economic Status of Community	• Number of families living below the poverty line • Number of families living in shelters • Rate of "doubled-up" housing families • Rate of families without health insurance coverage	• Number of community organizations providing emergency services (e.g., food, shelter) to families • Number of community organizations providing services beyond the crisis situation to families (e.g., job placement, skills training, etc.) • Money available for prevention • Number of agencies willing to be involved in collaborative effort (i.e., new or existing coalition)
Neighborhood Disorganization	• Rate of population turnover in a community • Heterogeneity of the environment • Incidence of graffiti, abandoned lots/buildings • Number of violence and felony offenses by ZIP code or census tracts • Number of drug-related offenses by ZIP code or census tracts • Number of facilities selling alcohol by ZIP code or census tracts	• Number of faith-based organizations • Number of resident volunteer neighborhood organizations and services • Rate of participation in elections (national, State, and local) • Participation at police/community council meetings • Participation at community board meetings
Anti-Social Behavior	• Number of reported school disciplinary incidents • Rate of truancy • Rate of juvenile offenses—drug-related, violent, property • High child-to-teacher ratio in schools	• Number of afterschool recreational programs • Number of alternative schools for youth with disciplinary problems • Involvement of police in truancy enforcement • Number of juvenile court rehabilitation services • Participation of parents in school meetings
Family Management and Parenting Practices	• Number of single-parent homes • Number of single parents working two jobs	• Number of agencies providing child care services • Number of agencies providing parenting and family services
Family History	• Number of adult offenders who have children who appear in Family and Criminal Court for substance abuse-related offenses	• Number of in- and out-patient substance abuse treatment facilities for parents and children • Community norms, as measured by number of substance abuse-related hospital admissions
Family Conflict	• Number of parental petitions of neglect filed in Family Court • Number of foster care placements • Number of kinship placements outside of the home • Number of reported domestic violence calls for service	• Number of agencies offering family conflict resolution • Number of family violence shelters and agencies • Number of family program specialists • Average number of child services agency contacts for home visitation to monitor serious problem situations

You may also encounter references to two types of data—quantitative and qualitative—within the broad archival and survey categories:

Quantitative data can refer to both archival records and surveys. Drug use surveys, arrest reports, emergency room admissions, and traffic reports are typical of quantitative data. Quantitative data consists of counts, rates, or other statistics that document the actual existence or absence of problems, behaviors, or occurrences.

Qualitative data reflect individual and community perceptions gleaned from focus groups, stakeholder interviews, and surveys. This type of data results in descriptions of problems, behaviors, or events. It is possible to add a quantitative component to qualitative data (e.g., of the 1,200 young people interviewed, 400 reported weekly alcohol use).

Because qualitative information can reflect the feelings and thoughts of people similar to those you will be working with, it often enhances the value of the available quantitative data. You may find it useful in persuading various audiences about the difference your prevention initiative can actually make in the lives of people within a particular community.

Data Specificity

Practically speaking, it is helpful to think about data on different levels of specificity. Each level addresses the substance abuse patterns of a different universe of people. For example, national surveys and the like may shed light on the beliefs and behaviors of middle school children across the country. A State survey may report the very same data for the middle school children in that State, perhaps even comparing its children to national averages to identify the existence of a problem or to determine if and how the State contributes to what has been identified in a national survey as a national trend. A county survey may collect and report the very same data as the State, comparing its findings to the rest of the State and perhaps comparing its children to those in other socially similar counties, and so on, down to the local level and school district, or even a particular school within the district.

Notice that each level of data reflects the substance abuse attitudes and behaviors of a narrowing band of people. As you move from a general overview to increasingly smaller and more specific groups, the data from the preceding level help focus attention more accurately and effectively on what is needed at the next level to clarify the problem. Your data collection efforts will be directed toward two goals: (1) to target your environmental and/or individual program effort(s) to the risk and protective factors you wish to change and (2) to measure the changes resulting from your program(s).

Collecting the level of data needed to accurately link individuals or specific geographic areas with programs can be a formidable challenge. Making a mistake at this point in the needs assessment is a serious matter and could compromise the outcomes you desire. This can happen if your goal is inappropriate, or if you assume that national, State, county, or school district data are representative of your more specific community- or neighborhood-based group. If you fail to narrow your identified group appropriately, you almost certainly will not be able to select or develop a program that addresses the group's very specific risk and protective factors, and you jeopardize the likelihood of achieving the intended outcomes or documenting the intended changes linked to your program(s). This remains true even if your group and/or program is preselected.

For instance, if your school district data indicate that there is a spike in marijuana use at the eighth grade, you must delve deeper to determine, if possible, which eighth graders are responsible for that spike and what their very specific and individual risk and protective factors are before you can select the most effective

Online sources that may be useful as you collect data for your needs assessment:

SAMHSA's PREVLINE—Contains links to many data sources: www.health.org

SAMHSA's Prevention Pathways—Includes information on prevention programs, program implementation, evaluation, technical assistance, online courses, and a wealth of other prevention resources: http://preventionpathways.samhsa.gov/

Office of National Drug Control Policy—Lists 30 links to data surveys and resources: www.whitehousedrugpolicy. gov/

National Criminal Justice Reference Service—Contains links to many sources of national and State crime statistics: www.ncjrs.org

Centers for Disease Control and Prevention—Contains links to many sources, including the Youth Risk Behavior Surveillance System survey: www.cdc.gov/

program. Narrowing your focus to just one or two specific middle schools may not be enough; you may have to focus very specifically on the individuals involved in the problem behavior. It is the risk and protective factors of those individuals that will inform your decision about which program has the greatest probability of success. If identifying specific eighth graders is not possible, identifying risk and protective factors that may be related to the spike in marijuana use is the next step. Then you can focus on a program that addresses the specific risk and protective factors that are germane to your school district.

Remember, even if you are assigned a program and an identified population, you should collect the data to determine the very unique characteristics of this specific population in your community. Having this data will enable you to decide if the program you have been assigned must be adapted to fit your identified population's needs (see chapters 3 and 4 for more on program fidelity and adaptation).

The remainder of this section describes a variety of data sources already available to you and indicates additional data you might need to collect on your own. As you might expect, the hardest kind of data to collect is community, neighborhood, and individual data. Yet, your success depends on it. And keep in mind that participating in a coalition might ease the burdens of data collection considerably.

National Data

National data identifies trends that are used to formulate national prevention policy. There are a number of national surveys and databases that are used in this way, such as the National Household Survey on Drug Abuse, the Youth Risk Behavior Surveillance System survey, and the Monitoring the Future Survey. Understanding national trends will provide clues as to the type of substance abuse behaviors that may be occurring in your community. However, you will still need local data to describe the unique situation where you live, which may or may not mirror national trends.

State and County Data

State and county data may be available from various sources, such as agencies providing child and family services (e.g., drug-affected babies); law enforcement agencies (juvenile and adult arrests for DUI and other drug offenses); department of transportation (alcohol-related traffic deaths and accidents); and the State medical examiner (drug-related deaths). Usually this kind of data is used to forecast trends and guide State officials regarding drug issues. Again, you still need local data to identify the substance abuse behaviors that are occurring in your community.

SAMHSA has funded large-scale needs assessments in many States and territories, which have included community-level school surveys. In States/territories that have received SAMHSA funding for a needs assessment project, these data may be available from the State agency responsible for substance abuse prevention.

Community and Individual Data

While there may be some local data available to you (e.g., school district surveys), it is likely that you will have to engage in hands-on data collection at the local level, making particular use of key stakeholders in law enforcement, schools, and neighborhoods. At this stage in your needs assessment, you are focusing on the risk and protective factors of individuals or specific community areas. This may be the first time that these data have been collected in a comprehensive manner. The following section on data collection outlines how you might go about collecting these individual- and community-level data. See also the box on the following page on community-level sources of data.

Data Collection

You may need to assemble a team to help with data collection. This team might include individuals with particular expertise in data collection and/or ties to, or influence with, those in control of local data sources. Often stakeholders or partners are included, because they are well positioned to provide information within their areas of responsibility. These may be school principals, teachers, school counselors, probation officers, caseworkers in the social service system, health department workers, administrators of homeless shelters, police and housing authority personnel, medical practitioners, and others.

The data collection team becomes a resource to: (1) provide access to data, which may be difficult to collect; (2) help identify underlying risk and protective factors; (3) serve as liaison to others in the community with relevant expertise; and (4) enrich data interpretation with knowledge of the population, policy, or environment you plan to address.

As discussed above, most data collection relies on one or several of the following data collection methods:

- Archival data from community commissions, agencies, and other sources

Community-Level Sources of Data

Adapted from National Institutes of Health, 1998.

It is not easy to identify sources of information at the community level, determine the types of information available, and establish ways to obtain the information initially and, perhaps, periodically. Information about drug abuse is likely to be confidential. The people responsible for collecting information and reporting on drugs are usually very busy, and they may have reservations about sharing information.

If your agency does not already have connections with community data sources through its members, there are two ways to initiate the process of identifying sources. They can be done concurrently. The first way is to get local telephone numbers of criminal justice, health, and treatment agencies, so that calls can be made to identify potential data sources. The mayor's office, chamber of commerce, or a similar source may have a directory of human resource organizations, or you can simply use the local telephone directory. Community or local telephone books generally specify pages for telephone numbers of local police and sheriff departments. Regular telephone directories may list these under Government Listings. Hospital and treatment programs may be listed in the yellow pages or the business section (by name). Support staff at network-backed agencies may be helpful in this task.

The second way to start identifying potential information sources at the community level is to start at the top and work down. To identify sources of arrest data, for example, begin by calling individuals at the State alcohol and drug abuse agency who can identify and provide a list of the substance abuse treatment programs that are located within or that serve particular communities. Call the State police department and the UCR office to find out who their contacts are at the local level. In trying to identify individuals and departments within hospitals, contact representatives of the State health department to find out what and who they know.

- Surveys based on self-administered questionnaires
- Interviewer-administered survey instruments (from key stakeholders, service providers, or identified population surveys)
- Focus groups
- Direct observations
- Review of archival records and databases (not created primarily for the purpose of the needs assessment)

Each of these methods can provide useful needs and resources data. The selection of methods for collecting data will depend on the focus of your program(s). Ideally, you will use multiple data collection methods, because the biases inherent in one method can be offset by another. The following scenario illustrates different data collection methods and how they can be utilized together:

Example: "Combining Data Collection Methods Effectively"

A mid-sized town in Texas was stunned when a two-car accident resulted in the deaths of two local teens and the serious injury of four other young people. Local authorities determined that alcohol and illicit drug use by the drivers of the two cars was the primary cause of the accident. Determined not to let this kind of tragedy occur again, citizens and family members began to look at their community together to learn what they needed to do.

First, they explored county records of car accidents and emergency room admissions related to late night injuries. They also worked with law enforcement officials who helped a committee examine arrest records for driving-related offenses. They worked with criminal court administrators to examine the outcome of judicial proceedings related to these arrests. From local law enforcement officials, they also obtained information about laws related to possession of alcohol and other drugs by minors and enforcement of those laws. They probed existing data with a view toward reformulating laws in the interest of community safety.

Next, they held a focus group with teenagers from the same high school attended by the youth involved in the accident. They explored the thoughts, feelings, experiences, assumptions, etc. of

the participants and learned that alcohol and drug use among high schoolers was more prevalent than they imagined. Many of the students were troubled by it, too.

They also learned that the school had conducted an anonymous survey in the past year that covered student substance use and risk and protective factors. The survey results were shared, thanks to school administrators who were part of the team. They continued collecting additional data in accordance with a comprehensive plan developed by the team responsible for framing the questions that needed to be reliably answered.

Volunteers interviewed key persons in the community to get their personal opinions about the problem. They interviewed the sheriff, the high school principal, several teachers, guidance counselors, the emergency room doctor, and several other key stakeholders in their town to guide their search for answers.

Armed with these data, they were ready to put the pieces of the puzzle together to see what still needed to be done to reach young people involved in the problem behaviors, to prevent others not yet engaged from becoming involved, and to identify the risk and protective factors of both groups.

Data Analysis

Once the initial data collection is complete, as a prevention practitioner, community specialist, or coalition leader, you will now work with other community partners and evaluators to analyze the data. This analysis will serve as a foundation to help you develop a strategic plan and select the appropriate programs. Your data analysis can support existing policies and programs and provide justification for grant applications.

Your analysis will also identify the data that are the most compelling, as well as those that are most suitable for use as baseline data. This is the initial information collected prior to program implementation, against which outcomes can be compared at strategic points during, and at completion of, a program to demonstrate change. For example, if your data show that 20 percent of eighth graders have used mari-

juana within the past 30 days, you can use this information as your baseline against which to compare future surveys. If you are able to show that 12 months after completion of your program, just 15 percent of eighth graders used marijuana within the past 30 days, you will be well on the road to demonstrating positive outcomes for your program. A word of caution, however, is needed here. The reduction in marijuana use might be attributable to factors other than your program; use of a comparison or control group is advisable to increase confidence in your outcomes, but is often difficult to manage.

As your analysis is unfolding, consider the following:

- Use the data to help you define the general substance abuse problem(s). The data can confirm the seriousness of a perceived problem, especially when compared to previous years. The data also may indicate if the problem appears to be more serious among certain subgroups (e.g., age groups, gender, geography, racial/ethnic background).
- Compare your data with other similar data (e.g., national, State, county, etc.). Are the trends similar? Are the rates about the same? Are they going up or down?
- Analyze what can be interpreted from the data.
- Decide on the likely target population.
- Evaluate the relationships between the risk and protective factors for the identified population and their relative importance. What is the appropriate mix of risk and protective factors to address? Is there an identifiable cluster of risk and protective factors that could be addressed together?
- Consider if the risk or protective factors can be changed. Most factors fall into one of three categories, or degrees, of changeability:

    1) Some risk and protective factors can be changed completely. For example, academic failure can usually be remedied through tutoring and/or placement in special education classes.

    2) Some risk and protective factors can be modified, but not changed completely. The availability of alcohol, tobacco, or illicit drugs in a community is one example. Your program might include environmental approaches to reduce the availability, but you are

not likely to eradicate the problem completely.

3) Some risk factors cannot be affected directly (or readily), such as extreme economic deprivation in a community.

- Consider associated problems you have not previously addressed in your analysis.
- Determine what resources exist in the community.

You will likely identify several critical problems during this analysis, and you will need to set priorities to determine which problems should be addressed first. There is no magic formula! Instead, you will base your criteria for prioritizing on the relative seriousness of the situation, the resources available (including the involvement of community partners), and the changeability of the factors identified.

Use Expert Guidance When Needed

Data can be time consuming to collect and confusing to analyze. It can be difficult to decide which information is relevant and which is not. Much of the collection and analysis involves subjective decisions that are enhanced by specialized expertise. Given the importance of needs assessment as the foundation for all of your future efforts, it makes good sense to include someone with expertise in this area in your coalition. If resources permit, this might include hiring a professional evaluator.

If you need such expertise, but are short on resources, you may have to search for a creative solution. You may find the help you need at a local university, corporation, or even a large teaching hospital. Invite such groups/institutions to become part of your coalition. If you cannot secure these services as in-kind assistance, consider bartering for this important resource. University researchers or graduate students may be able to use your data for their own projects. Some experts may be willing to donate their time and assistance to you now if, at a later time when your funding is more secure, you are willing to contract with them for their paid services.

Ongoing Assessment

Your needs and resources assessment should be ongoing. The initial data collected and analyzed to describe your environmental concern(s) and/or your target population's substance abuse problem and to identify risk and protective factors constitute baseline data for your prevention work. They define precisely the population and the risk and protective factors that you will address. Baseline data constitute the standard, or baseline, against which you will measure all subsequent changes that occur as a result of your program(s).

As you will see in later chapters, tracking your progress through periodic data collection, or documentation, is an ongoing process. If you are a coalition, it will ensure that your partners remain on target, that extraneous factors do not intervene, and that the outcomes—immediate and intermediate, as well as long-term impacts—are as anticipated. You may find that additional assessment will be needed along the way if evaluation at the appropriate stages of implementation does not show the expected changes.

Evaluation Tutor

SAMHSA's Prevention Pathways Web site at http://pathwayscourses.samhsa.gov/samhsa_pathways/courses/index.htm **includes a number of useful online courses for prevention professionals.**

Reviewing these courses is appropriate at this data collection juncture, as well as later during implementation and final evaluation stages.

- **Evaluation For the Unevaluated: Program Evaluation 101**
- **Evaluation For the Unevaluated: Program Evaluation 102**
- **Wading Through the Data Swamp: Program Evaluation 201**

In Summary

Participating in a comprehensive needs and resources assessment process enables prevention practitioners and community collaborators to take a hard look at the underlying factors that contribute to the general substance abuse problem. This is a prerequisite for developing a comprehensive plan to address the problem(s).

This process includes reviewing different types of data and considering the value of creating a team effort in order to gain access to critical data, obtain data from particular sources, or explain the data you already have.

Although there is no exact formula for responding to the needs you will identify, it is important that you understand the value of utilizing someone who has expertise in assessing the information and who can provide specific guidance.

The conclusions from your analysis of the data form a pathway for setting goals and objectives for your comprehensive plan and developing a credible theory (or theories) of change. From this theory of change you can develop a logic model to guide your work. You will find additional information about logic models and how to use them to organize your program in chapter 4.

Once you complete your multi-layered needs and resources assessment, you will be ready to tackle the steps outlined in subsequent chapters. Further steps include assessing your capacity, selecting and implementing your program, and evaluating your efforts. By the time you complete this process, you will see how all of these steps relate and interact in a logical way. You will be on your way to success.

SAMHSA Resources

SAMHSA-related Web sites:

Center for Substance Abuse Prevention/National Center for the Advancement of Prevention Decision Support System: www.preventiondss.org

Centers for the Application of Prevention Technologies: www.captUS.org

Prevention Online (PREVLINE)—SAMHSA's National Clearinghouse for Alcohol and Drug Information: www.health.org

A number of useful SAMHSA technical assistance bulletins are available through the National Clearinghouse for Alcohol and Drug Information (NCADI), P.O. Box 2345, Rockville, MD 20847. A full list is available at http://store.health.org/. See the Web site for the specific bulletins listed below.

Careful concept development paves the way to effective prevention materials. (1994). Available: www.health.org/govpubs/MS493/

Following specific guidelines will help you assess cultural competence in program design, application, and management. (1994). Available: www.health.org/govpubs/MS500/

Identifying the target audience. (1997). Available: www.health.org/govpubs/MS700/

PATHWAYS online

SAMHSA's Decision Support System Web site can be accessed at www.preventiondss.org. Here you will find this document and additional materials to assist you as you work through the *PATHWAYS* process.

Resources and References

Arthur, M.W., & Blitz, C. (2000). Bridging the gap between science and practice in drug abuse prevention through needs assessment and strategic community planning. *Journal of Community Psychology, 28* (3), 237-255.

Brounstein, P.J., Zweig, J.M., & Gardner, S. (2002). *Science-based practices in substance abuse prevention: A guide*. Available: http://modelprograms.samhsa.gov/template.cfm?page=pubs_science

Center for Substance Abuse Prevention. (2002). *2002 Annual report of science-based prevention programs and principles* [Online]. Available: www.modelprograms.samhsa.gov/template.cfm?page=pubs_2002report

Florida Department of Children and Families. (2000). *Florida Youth Substance Abuse Survey state report*. Tallahassee: Author.

Hawkins, J.D., Catalano, R.F., & associates. (1992). *Communities that care: Action for drug abuse prevention.* San Francisco: Jossey-Bass.

Institute of Medicine. (1994). *Reducing risk for mental disorders: Frontiers for preventive intervention research.* Washington, DC: National Academy Press.

Join Together. (1999). *Beyond anecdote: Using local indicators to guide your community strategy to reduce substance abuse* [Online resource database]. Available: www.jointogether.org

Join Together. (1999) *How do we know we are making a difference?* [Online purchase information available: www.jointogether.org]

Kretzmann, J.P., & McKnight, J.L. (1993). *Building communities from the inside out: A path toward finding and mobilizing a community's resources.* Evanston, IL: Northwestern University.

Leffert, N., Benson, P.L., & Roehlkepartain, J. (1997). *Starting out right: Developmental resources for children.* Minneapolis, MN: Search Institute.

National Center for Chronic Disease Prevention and Health Promotion. *Behavioral risk factor surveillance system* [Online database containing citation information for official state publications that include BRFSS data, such as Healthy People 2000 reports and newsletters]. Available: www2.cdc.gov/nccdphp/brfss2/publications/index.asp

National Institutes of Health. (1998). *Assessing drug abuse within and across communities: Community epidemiology surveillance networks on drug abuse.* (NIH Publication No. 98-3614). Washington, DC: U.S. Department of Health and Human Services.

Nieto, R.D., Schaffner, D., & Henderson, J.L. (1997). Examining community needs through a capacity assessment. *Journal of Extension, 35* (3).

Northwest Regional Educational Laboratory. (n.d.). *Highlights of research on resiliency* [Online]. Available: www.nwrel.org/cfc/frc/pdf/handout1.pdf

Schorr, Lisbeth B. (1992). *Common purpose: Strengthening families and neighborhoods to rebuild America.* New York: Anchor Books (Doubleday).

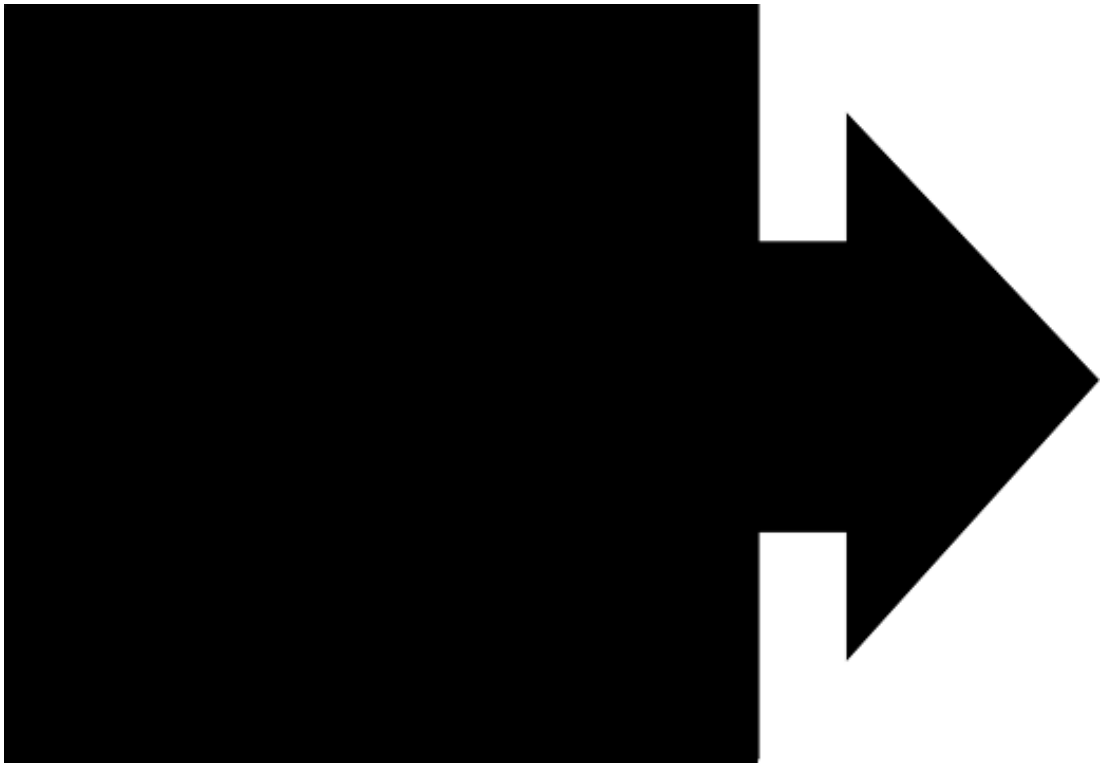
University of Kansas Work Group on Health Promotion and Community Development. (2000). Section 9: Developing baseline measures of behavior. In *Community toolbox:* Chapter 3: Assessing community needs and resources [Online toolkit for substance abuse prevention practitioners]. Available: http://ctb.lsi.ukans.edu/tools/EN/chapter_1003.htm

W.K. Kellogg Foundation (n.d.). Chapter 4: Exploring the three components of project-level evaluation: context evaluation, implementation evaluation, and outcome evaluation. *W.K. Kellogg Foundation evaluation handbook* [Online]. Available: www.wkkf.org/knowledgebase/Pubs/AlphaPubs.aspx?Letter=w

Young, N., Gardner, G., Coley, S., Schorr, L., & Bruner, C. (1996). Making a difference: Moving to outcome-based accountability for comprehensive service reforms. *National Center for Service Integration resource brief 7* Available for purchase at: www.family-supportamerica.org/content/home.htm

Chapter 2

Build Capacity



Introduction

Before you can effectively select substance abuse programs*, it is important to examine your organization's capacity to bring about the changes that you would like. *Capacity* refers to the various types and levels of resources that an organization has at its disposal to meet implementation demands.

There are three steps involved in evaluating your organization's capacity:

1. Determine your internal capacity (including cultural competency) and readiness—human, technical, and financial;

2. Determine the readiness of your community to support your efforts and collaborate with you as you implement the selected program (teambuilding); and

3. Assess your external capacity—human, technical, and financial.

It is especially important that you understand what the resources are that will help lead you to measurable success. Resources include more than just funding. You will need sufficient funds or in-kind contributions, of course, but other resources are just as important. You will need *human resources*—staff or volunteers—with specific skill sets, including leadership, program development, and networking abilities, to carry out the intended program. You will need facilities, transportation, office supplies, equipment, and other fixed capital to ensure sufficient capacity to implement sound programs. Central to your general capacity—and the area where programs often falter—you will need management and evaluation resources. You may need to seek outside resources to augment those you already have.

Specific programs will dictate the types of capacity you will need. An absence of these resources will almost certainly jeopardize your effort. You simply will not have the tools to implement the selected prevention pro-

**As used throughout this publication, the term "program" refers to the sum total of organized, structured interventions, including environmental initiatives, designed to change social, physical, fiscal, or policy conditions within a definable geographic area or for a defined population.*

gram(s) well. This may require you to select another program (or programs) that meets identified needs but requires fewer or different resources.

In this chapter, you will assess the overall capacity of your group or *coalition* to reach your goals and assess whether the community is ready to support the program. This part of the process ensures that the required resources will be in place when needed, whether the program is small and very specific, or large and comprehensive. Individual members of a coalition will also want to undertake this capacity assessment before making decisions about program selection.

Assessing your areas of capacity and readiness will

- Help you make a realistic match between the needs you have identified in your needs and resources assessment (see chapter 1) and the capacity of your coalition to address them;
- Provide the evidence you need to assure yourself and others that you have the ability to reach your desired outcomes;
- Reveal strengths and shortfalls in your capacity in key resource categories;
- Provide an opportunity to make up for anticipated shortfalls, find a way around them, or select another program that better matches your capacity.

Important Terms

Capacity: In this publication, the various types and levels of resources that an organization has at its disposal or can access to meet implementation demands.

Coalition: A partnership of social, political, health, faith, education, law enforcement, and other relevant organizations, as well as community stakeholders, working together to advance substance abuse prevention and reduction within a community or geographic area. In a more generic sense, coalitions can refer to groups of people working together to accomplish a mutually acceptable goal.

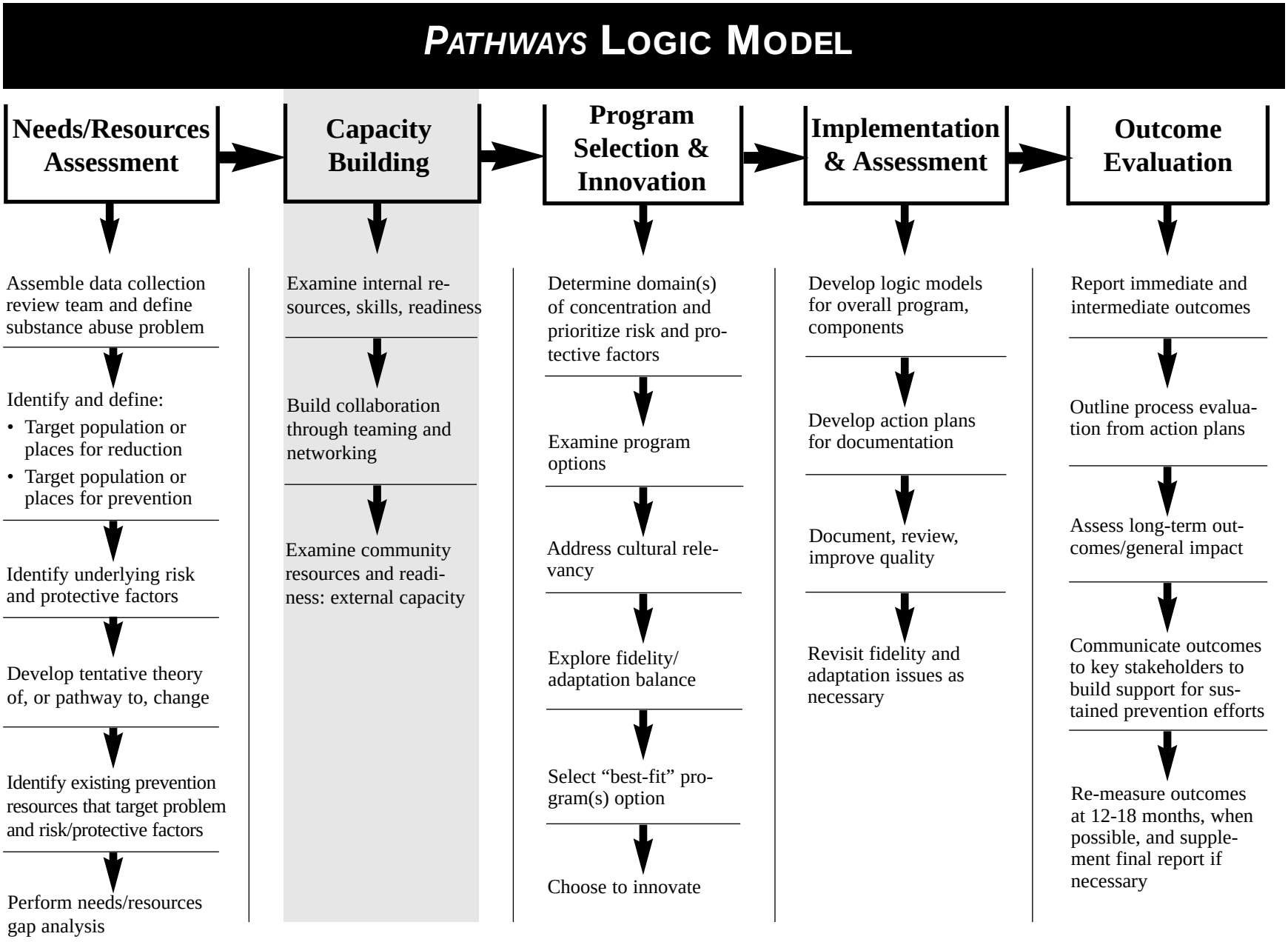
Collaboration: The process by which people/organizations work together to accomplish a common mission.

Community Readiness: In this publication, not only the community's awareness of, interest in, and ability and willingness to support substance abuse prevention programs, but also the availability of skills and resources within the community and the ability of the prevention agency and/or coalition to access these resources.

Cultural Competence: The capacity of individuals to be sensitive to and to incorporate ethnic/cultural considerations into all aspects of their work relative to substance abuse prevention and reduction.

Human Capacity/Resources: The collective knowledge, attitudes, motivation, and skills of the program implementers and other stakeholders.

Stakeholders: As used in this publication, all members of the community who have a vested interest (a stake) in the activities or outcomes of a substance abuse program.


PATHWAYS LOGIC MODEL
Needs/Resources Assessment
Capacity Building
Program Selection & Innovation
Implementation & Assessment
Outcome Evaluation
Assemble data collection review team and define substance abuse problem
Identify and define:
• Target population or places for reduction
• Target population or places for prevention
Identify underlying risk and protective factors
Develop tentative theory of, or pathway to, change
Identify existing prevention resources that target problem and risk/protective factors
Perform needs/resources gap analysis
Examine internal resources, skills, readiness
Build collaboration through teaming and networking
Examine community resources and readiness: external capacity
Determine domain(s) of concentration and prioritize risk and protective factors
Examine program options
Address cultural relevancy
Explore fidelity/ adaptation balance
Select "best-fit" program(s) option
Choose to innovate
Develop logic models for overall program, components
Develop action plans for documentation
Document, review, improve quality
Revisit fidelity and adaptation issues as necessary
Report immediate and intermediate outcomes
Outline process evaluation from action plans
Assess long-term outcomes/general impact
Communicate outcomes to key stakeholders to build support for sustained prevention efforts
Re-measure outcomes at 12-18 months, when possible, and supplement final report if necessary

Logic Model Discussion for Capacity Building

Here again is the logic model for *PATHWAYS*. This time, the shaded area shows how chapter 2 fits into the overall framework. The activities and tasks that make up the capacity-building component of the *PATHWAYS* process are described below. You will find more information about logic models and their role in *PATHWAYS* in chapter 4.

Capacity-Building Action Steps

- **Assess Organizational Resources (Internal Capacity)**
  - — Examine breadth and depth of cultural competency, as well as skills for administrative tasks, long- and short-term planning, communication, decisionmaking, problem solving, conflict resolution, and creative thinking
  - — Examine abilities for:
    - Networking within the field and among key people in the community
    - Reaching out to community "doers," volunteers, and program participants
    - Mobilizing groups of people for action
  - — Assess technological needs for client tracking and evaluation services
  - — Determine financial resources for implementation and operational expenses

- **Build Collaboration**
  - — If you are a single agency practitioner:
    - Identify potential partners for team building
    - Assess availability of other kinds of local support (e.g., from foundations, United Way, Chamber of Commerce, Rotary, etc.)
    - Achieve greater visibility in the community and with the media and key stakeholders
    - Mobilize these potential partners and stakeholders
  - — If you are a coalition with partners in multiple locations, or you are a coalition within other coalitions:
    - Make sure each of your coalitions has sufficient capacity. If not, develop a plan to help them build the needed capacity.
    - Ensure that as a coalition you are making the most of collaboration to conserve resources and maximize results

- **Assess Community Readiness and Resources (External Capacity)**
  - — Examine awareness of substance abuse problem(s) among populations and areas affected by the problem and among groups assuming leadership roles relevant to community health
  - — Determine community norms relevant to substance abuse behavior
  - — Identify key stakeholders and assess skills and commitment and access to resources that will support your effort
  - — Develop approaches (e.g., media campaigns) that address gaps in community readiness and use stakeholders to identify and provide access to other stakeholders who do have these necessary skills and resources

Determine the Internal Capacity and Readiness of Your Organization

How ready and capable is your organization to carry out the proposed prevention program to meet your prevention goals and objectives? There are three broad categories of resources to consider as you assess your internal capacity: human, technical, and financial.

Resources in these vital areas are key to the effective functioning and survival of any group or organization. They are the organization's backbone, its infrastructure.

Human Capacity: The skill sets of the people involved in the program
As noted earlier, assessing your areas of capacity and readiness will

- Help you make a realistic match between the needs you have identified in your needs and resources assessment (see chapter 1) and the capacity of your coalition to address them;
- Provide the evidence you need to assure yourself and others that you have the ability to reach your desired outcomes;
- Reveal strengths and shortfalls in your capacity in key resource categories;
- Provide an opportunity to make up for anticipated shortfalls, find a way around them, or select another program that better matches your capacity.

Staff and skill sets are an important component of this internal or organizational capacity assessment. Skill sets refer to the ability to handle various functions. A leadership skill set, for instance, includes abilities in long- and short-term planning, communication, decisionmaking, and conflict resolution. Staffing should also include personnel with skill sets in the areas of communication/public relations, budgeting, fundraising, administrative support, evaluation, and project management. In a very large project, there may be a team of people carrying out these functions. In a very small project, one or two people may perform all of these tasks or work collaboratively with others who are skilled in these areas. As you decide who should do which task, examine abilities for

- Networking within the field and among key people in the community,

- Reaching out for additional community support and program participants, and
- Mobilizing groups of people for action

Carefully scrutinize the credentials and abilities of the individuals who will be handling the required implementation tasks and supervision. It is important that you know what you are looking for in a staff member. You may have a number of criteria, such as the applicants' skills, their personal qualities, their commitment to, or passion for, your issue, and/or their demographic characteristics. You may be trying to attain a certain level of staff diversity to be representative of the population you are serving. The following example shows what can happen when planning and assessing staff capacity are insufficient for the desired prevention initiative:

Example: "Insufficient Staff Capacity"

A well-established rural neighborhood youth club wanted to expand its service array and offer more specialized prevention programs directed at families. Having determined that many of the youth coming to the club were often engaged in conflict in their homes, the club's grant writer pursued funding for a model prevention program that encompassed family intervention strategies. The grant writer had determined that the model program met the needs of the defined population and that it had been proven successful in similar environments. However, she had not assessed the staff qualifications that were required for delivering therapeutic family programs.

When the club received the requested funding from its county government, the director became aware of the deficiency in staff capacity to implement the chosen program successfully. The club had only budgeted for existing staff, none of whom had the appropriate skill sets to implement the new program. The director was faced with an insufficient budget for hiring the staff needed for the new program and the challenge of attracting an appropriately qualified staff to a rural environment.

In this example, had the grant writer assessed the alignment between the existing staff capacity at the youth club and the staff credentials needed for the new program, she would have seen the obvious disparity between program needs and the club's capacity. In response, she could have planned a strategy to develop and budget for the appropriate staff to execute the desired program. Alternatively, she could have selected a program that was feasible within the parameters of the club's existing capacity.

Capacity Encompasses:

- An organization's staffing, technical, and financial skills
- An organization's networking and collaborative capacity
- Your community's resources for support
- Your community's norms and readiness for change

Assessing Cultural Competence

Use this checklist to measure how prepared your organization is for multicultural work and to identify areas for improvement. If you cannot check off an item, it may indicate the need for change in that area.

- The leadership of our organization comes from a diverse background.
- We make special efforts to cultivate new leaders, especially people who have not been previously empowered.
- Our mission, operations, and products reflect the contributions of diverse cultural and social groups.
- We are committed to equality within the organization and in our work in the community.
- Members of diverse cultural and social groups are full participants in all aspects of our organization's work.
- Speakers from any one group do not dominate meetings.
- All segments of our community are represented in decisionmaking.
- There is sensitivity and awareness regarding different religious and cultural holidays, customs, recreational preferences, and food preferences.
- We communicate clearly, and people from different cultures feel comfortable sharing opinions and participating in meetings.
- We prohibit the use of stereotypes and prejudicial comments.
- Ethnic, racial, and sexual slurs or jokes are not tolerated.

Adapted from *Community Toolbox*. Cultural competence in a multicultural world.

Capacity for Cultural Competence

Culturally sensitive and responsive prevention programs are important. The capacity of individuals to incorporate ethnic/cultural considerations into all aspects of their work relative to substance abuse prevention and reduction is called *cultural competence*.

Here are the kinds of questions to ask in assessing your organization's cultural competence: Does the organization continuously strive to build cultural competence within its staff? Do you encourage development of academic and interpersonal skills that allow personnel to increase their understanding and appreciation of cultural differences and similarities in others? Is the staff representative of the defined population? Is the staff willing and able to draw on community-based values, traditions, and customs? Is the staff willing and able to work with knowledgeable persons from the community in developing tailored programs and other supports?

A commitment to cultural competence encompasses the following:

- Acknowledging that cultural differences exist and have an impact on the delivery of substance abuse prevention programs.
- Respecting the culturally defined needs of the population, including the complexities of multiple cultures. People are rarely defined by one culture.
- Recognizing that the number of people who describe themselves as biracial or multiracial is increasing rapidly. This challenges many past assumptions about specific approaches tailored to race, ethnicity, or culture. While there is no easy answer, having the capacity as an organization or coalition to understand, be respectful of, and respond to evolving diversity is an important quality.

- Understanding that people from different racial and ethnic groups and cultural subgroups usually are best served by persons who understand and are sensitive to those cultures.
- Recognizing that embracing cultural diversity enhances the capacity of all.

Building cultural competency means changing how people think about other cultures and how they communicate. It also means that the structure, leadership, activities, and messages of an organization should reflect many perspectives, styles, and priorities.

Technical Capacity: Specialized support that sustains an organization

Depending on the size and scope of your organization and your planned program, you may need technical capacity not regularly available. This includes managerial, administrative, or specialized support, such as evaluation skills, to carry out your particular prevention efforts. You may need this specialized expertise intermittently and not on a full-time basis. Other community groups, agencies, and businesses may have resources to provide support for your prevention initiative(s).

- Managerial support maintains information on all activities and their outcomes, establishes protocols for allocating resources, and institutes strategies for working with program staff and volunteers, if they are used. Your group or coalition may not need a sophisticated management information system (MIS); a simple tracking system (even non-computerized) may be adequate for a small operation. Check with your region's Center for the Application of Prevention Technologies (CAPT) for guidance on tracking and management solutions that may suit your needs. (For more information about the CAPTs, go to www.captUS.org.)
- Administrative support represents facility management, communications, operations, and logistics (e.g., phones, faxes, databases, and the Internet; training and human development; and office tasks, such as keyboarding, filing, and preparing reports). Business activities, including bookkeeping, payroll, purchasing, and accounting, also fall under administrative support. The New York Foundation for the Arts has created a handy technology assessment tool for the nonprofit sector to help assess needs in this area (see resources section for how to access this tool online).
- Specialized support refers to the kinds of infrastructure you may need for a particular program, such as desktop publishing or large event planning and production. Specialized support can also refer to your need for expert professional evaluation assistance, as will be described in chapter 5.

Financial Capacity: The ability to leverage funding to implement desired programs
Inadequate funding is often a reason why prevention efforts fail. Funding capacity relates to assessing the costs of implementing the proposed program(s) and determining how to make up deficits by securing donations or leveraging resources. Most important, it means developing a long-term funding strategy that ensures sustainability.

Here are some ways to improve your funding capacity:

- Use networking skills to keep informed and to develop connections with others.
- Appoint someone in your coalition to track funding opportunities that might be available.
- Seek out a local professional with grant writing and content area expertise to review your proposal, even if you cannot afford to hire a resource developer/grant writer. Guidance on grant writing and resource development is widely available. See this chapter's resources section for leads to helpful publications and Web sites.
- Find a like-minded tax-exempt organization to apply for a grant on your behalf. That same group, often called a "lead agency," might also manage the grant funds you receive.
- Stay connected with potential funding sources and have action plans already developed so you can move quickly when an opportunity comes your way. Funding success often means being in the right place at the right time.
- Get to know your local political leaders so that they return your calls; make sure that they and other key stakeholders understand the importance of your issues.
- Diversify your funding so you will not be dependent on a single source of support.
- Stick to opportunities that are consistent with your mission. This will prevent internal and external confusion about your program identity and help create a local base of support.
- Coordinate grant applications within a coalition to take advantage of several funding streams for the various components of your prevention efforts.

Few grant awards are large enough to fund development, implementation, and proper evaluation of a program. You should be prepared to leverage grant money and other resources so that the prevention effort does not falter in its implementation cycle, or when the initial grant is finished.

If you are part of a coalition, there should be a development unit or committee responsible for identifying and pursuing funding opportunities. This is often a role for a board and management team. Internally, the coalition also needs to have skilled staff to manage and report on financial matters.

Example: "Financial Capacity Considerations"

The Teen Development Program is an effective parent-training program developed for intervention with at-risk teens. However, it requires a highly qualified leader for every 15 families to conduct weekly group sessions, individual family meetings, and mid-week supportive phone calls. In addition, the program recommends a parent consultant to facilitate the group process and parent participation. Also, parent incentives (such as dinners, movies, bowling), child care, and meeting snacks add to the expense, although they also improve the level of participation. Training is required either onsite or at a nearby community center. Selecting the onsite training option adds $500 per day to the training costs. There are also expenses involved in purchasing a leader's guide and workbooks.

In short, there are financial considerations for nearly all programs. Some programs may simply be beyond your financial capacity to implement well, even if they are appropriate to the group's objectives.

Figure 2.1 Guide for Internal Capacity Assessment

Assess the strengths and weaknesses of **strategic leadership** within the coalition:	• Leadership (managing organizational culture, setting direction, supporting resource development, ensuring tasks are completed) • Strategic planning (scanning environment; developing tactics to attain objectives, goals, mission) • Governance (legal framework, decisionmaking process, methods for setting direction, external links) • Structure (roles and responsibilities, coordinating systems, authority systems, accountability systems)
Assess the strengths and weaknesses of the following **systems, processes, or dimensions of human resources** (managerial, direct service, technical/support staff):	• Human resource planning (recruiting, selecting, orientation) • Training and professional development (performance management, monitoring, and evaluation) • Career management (record keeping, merit) • Compensation (wage rates, incentives) • Equity (gender, minority issues)
Assess the strengths and weaknesses of other **core resources**:	• Infrastructure (facilities, equipment, maintenance systems, utilities) • Technology (information, communication technologies, levels of technology needed/acquired to perform work) • Finance (planning, managing and monitoring cash flow and budget, ensuring an accountable and auditable financial system)
Assess the strengths and weaknesses of **program management** within the funded agencies:	• Planning (identifying needs, setting objectives, pricing alternatives, and developing evaluation systems) • Implementing (adherence to schedules, coordination of activities) • Monitoring (systems for evaluating progress, communicating feedback to stakeholders)
Assess the strengths and weaknesses of **process management** within the funded agencies:	• Planning (identifying needs, looking at alternatives, setting objectives and priorities, pricing activities, and developing evaluation systems) • Problem solving and decisionmaking (defining problems, gathering data, creating alternatives, deciding on solutions, monitoring decisions) • Communications (exchanging information, achieving shared understanding among organizational members) • Monitoring and evaluating (collecting, generating, and analyzing data, tracking progress, judging performance, utilizing information, changing and improving organization, program, etc.)

Adapted from Lusthaus, Anderson, and Murphy, 1995.

Teaming: Capacity Building Through Networking and Collaboration

Prevention practitioners increasingly realize they should adopt comprehensive, interrelated approaches to prevention to deal with the multiple and interrelated factors that contribute to substance use/abuse. *Collaboration* is the process by which several agencies or organizations make a commitment to work together to accomplish a common mission. It allows them to capitalize on each other's program and administrative strengths, by, for example, sharing technical assistance from specialized experts or working together to mobilize additional funding and community volunteers.

Through collaboration, organizations are able to

- Simplify or enhance the needs and resources assessment process;
- Identify gaps in current services and work together to fill those gaps;
- Expand available services through cooperative programming;
- Provide better services through interagency communication about participant needs;
- Share similar concerns while being enriched by the diverse perspectives that members from various backgrounds bring to the collaboration;
- Reduce competition for addressing issues;
- Improve communication with organizations in the community and through those organizations to larger segments of the community;
- Mobilize to effect needed changes through collective advocacy;
- Achieve greater visibility with decisionmakers, the media, and the community;
- Enhance individual skill levels by sharing information and organizing joint training programs;
- Conserve resources by eliminating duplication of efforts.

Team Building

Depending on the scope of your prevention effort and the size of your organization or coalition, you may now want to consider building a team for implementing prevention program(s). While this step could wait until program implementation actually begins, it is well to start thinking about it as part of the capacity-building process. This implementation team may be different from the one you assembled for needs and resources assessment.

Your implementation team will consist of individuals who have a vested interest in the specific problem or, more generally, in the prevention and treatment of substance abuse. Parents are an obvious choice. Others include the faith community, the media, school personnel, health professionals and public health organizations, social service agencies, law enforcement, and elected officials.

Obviously, the scope of the program you select determines how much of the greater community should be involved and to what degree. For a comprehensive program, and certainly for a coalition, representatives from the following groups are essential:

- youth
- parents
- business community
- media
- public and private schools
- youth-serving organizations
- institutions of higher learning
- law enforcement agencies
- religious or fraternal organizations
- civic and volunteer groups
- healthcare professionals
- state, local, or tribal governmental agencies

Example: "Capacity Building"

Ward 6 is a poor, inner-city neighborhood with extremely high rates of unemployment and crime, substandard housing, low educational achievement, drug-related arrests, and single-headed (mostly female) families. Community leaders Patricia Salazar and her husband were concerned about these problems and, in particular, concerned for the overburdened mothers. They determined that classes in parenting skills offered at night, after working hours, would be a good beginning to improve the environment for children.

The parenting classes were very well received and attended. However, through discussions with the mothers, the Salazars realized the community needed to address another significant need. Many of the elementary school age children and most of the middle school age youngsters in their neighborhood are latchkey children—usually on the streets without supervision after school hours. This places them at greater risk of negative influence from peers, older students, and others who might encourage them to use alcohol, tobacco, and illicit drugs.

The Salazars did not have the capacity to address this problem by themselves. Building upon established relationships with some community leaders and forging new partnerships with other community service providers, they were able to create a comprehensive afterschool program for these neighborhood youth. These efforts included the following: connecting with a local church that had a van that was not used on weekday afternoons; recruiting retired people in the community to drive the van to the middle school each day to pick up students and transport them to Casa Unido, the local community center; arranging for high school honor students to tutor and help with homework as part of their required community service hours; obtaining donations of a ping-pong table and basketball equipment; and arranging for sports enthusiasts to super-vise recreation. They were even able to acquire insurance coverage for the volunteer drivers and the van through a donation from a local insurance company.

This kind of collaboration is part of capacity building. It worked particularly well because each partner's contribution suited its own individual purposes or interests.

The team brings various perspectives to determining your program. You may choose to address an easier problem in order to build community support around a successful undertaking. Or, you may want to tackle a more complex, multiple-problem program that will take full advantage of the resources and partners already in place. In all cases, the community should be ready to support the approach adopted.

If the team decides to tackle a problem that is less urgent, but potentially more reasonable under the circumstances, you should not forget the larger problem. It can be addressed by others who have the capacity to do so sooner, or it can be established as a long-term goal to be tackled by your team at a later date.

In *Stir It Up: Lessons in Community Organizing and Advocacy* (Jossey-Bass, 2003), authors Rinku Sen and Kim Klein differentiate between prevention/reduction for a specific group of individuals, or for a narrowly defined neighborhood or community.

> At the base of . . . collective action lies a commitment to organizing the people most affected or most interested in problems created by substance abuse. The organizing process itself can transform people, presenting community members as agents of change rather than as victims of the status quo. Organizing, however, requires consistent, systematic work in the form of phone calls, reports, conversations, meetings, information, and the patience to deal constructively with the failed campaigns and incremental successes that are inevitable.
>
> Organizing results in an organization with a wide range of activities focused on a clear mission and goals. It is distinguished from mobilization, which involves large numbers of people expressing their resistance or support, whether through a demonstration or petition, because organizing carries an expectation of sustained activity. Mobilization, on the other hand is episodic.
>
> For groups that are new to organizing, it is important to define a clear constituency and a systematic plan for involving people who have knowledge of the problem, access to other people and resources to help identify the root causes of the problems, a commitment to resolving the problems, the potential for leadership, planning and related organizational skills, and community respect that can be tapped into to enhance group interests. Having a clear but flexible organizational structure, in which people

can become leaders but not get permanently attached to a position, will help make the effort inclusive.

For groups that have already been organizing, it is important to review the organization's constituency, structure and culture during all strategic planning processes, so the group can have the opportunity to deliberate about expanding or deepening its work. Experienced groups tend to become complacent about and limited in their outreach; they work mainly among already established leaders rather than continuing to expand their base.

Groups that combine organizing with direct services need to be completely clear about the differences between their various strategies, what they are trying to achieve with each, and how they will deal with potential conflicts.

All organizing efforts should be willing and able to integrate experience with credible information. Many organizations resist this need for substantial research and factual information, feeling that attention to evidence-based information or theory makes organizations elitist. Inasmuch as much of the analytical and theoretical writing practitioners need is in academic and inaccessible language, non-academics are often frustrated by what they perceive to be "roadblocks" to inclusion. However, these "are obstacles that need to be dealt with; they are not excuses for avoiding" the kind of analysis that enables practitioners to make the case to those who can assist with change.

No matter how great you are at organizing, there has to be broad-based public support for a sustainable, outcome-oriented effort.

Assess External Capacity: Community Resources & Readiness

The same three key capacity areas—human, technical, and financial—also need to be examined as they relate to resources outside your group or coalition. As noted previously, you need to consider diverse external funding streams. These include local funding initiatives, such as individual donations and direct local support from government entities or other organizations; regional and Federal initiatives, such as State block grants and State and Federal grant programs; and foundation support.

External support from community members can also add value to your prevention efforts. Most nonprofit organizations rely on community member participation to varying degrees. The jobs done by these individuals are as varied as the people who do them. For example, a high school student may provide tutoring assistance to younger children, an accountant may help the group or coalition apply for tax-exempt status, as may a retired city commissioner who has an interest in the community's anti-drug efforts. Regardless of the actual tasks they do, contributions from community members in terms of time, energy, skills, and other resources are critical for success. The involvement of community members in your group or coalition directly expands your program's constituency and network of support.

Physical resources also enhance your group's capacity. For example, schools or faith community buildings may provide space for afterschool programs, while the community library may donate meeting space for prevention-related classes or board meetings. Other agencies and businesses may offer the use of vehicles, computers, or other equipment. Creative use of your community's physical resources can reduce expenditures and increase access to prevention services.

Examining Overall Community Readiness

Assessing your organization's internal readiness and the external resources available for additional support are important steps. But you should also consider whether the community as a whole, or important segments of the community, are open to the kind of change you would like to bring about, and, if so, the nature of the human, technical, and financial resources that could be marshalled to supplement and support your organizational effort.

Research and experience over the past decade show that communities vary in their level of readiness to implement a prevention program. *Community readiness* refers to a community's awareness of, interest

in, and ability and willingness to initiate and support substance abuse prevention efforts as well as the availability of skills and resources within the community.

The degree of readiness within a community can be viewed as a stage in which prevention efforts can be either facilitated or thwarted. There are nine stages of readiness (see figure 2.2), according to Edwards et al. (2000). The National Institute on Drug Abuse (NIDA) found similar factors to be associated with a community's readiness for prevention programming.

Enduring, coordinated, and comprehensive prevention efforts are more likely to have the desired impact when there is community buy-in, and that occurs only when efforts are supported by community norms and values. For example, if community norms "support" serving alcoholic beverages at community events such as July 4 celebrations, festivals, etc., it is unlikely that the community is "ready" to embrace a zero tolerance policy for teen drinking. An informational, advertising campaign or several other environmental efforts, designed to educate the community on the dangers of alcohol use, might need to precede any sort of program for youth.

You need to ensure that *stakeholders*—individuals or groups in the community who have a vested interest in the success or failure of your efforts—are involved in your plan. They are vital to enhancing the credibility needed by your group or coalition to function successfully. And, as noted earlier, they bring essential external resources to the table. The higher the level of community buy-in, the more sustainable your effort will be over time.

The stakeholders you involve should be as diverse as the population you plan to serve. Include representatives of every sector of the community—government, law enforcement, and schools; people most affected by the program you are planning; diverse cultural, social, and faith community groups; business leaders and other people with influence in the community; and people in control of resources or who have access to resources needed by your effort. Key stakeholders might include the police chief, business leaders, a number of minority associations, the mayor, and many others. As a community coalition, all of these stakeholders should be represented in your membership. How you involve these stakeholders and how extensively you broaden community representation in your prevention efforts will vary with the scope of your work and the programs you select.

Figure 2.2 Stages of Community Readiness

Stage 1: Community Tolerance – Norms tolerate or encourage the behavior.

Stage 2: Denial – There is little or no recognition of the evident problems.

Stage 3: Vague Awareness – There is a general belief that a problem exists, but awareness is only linked to one or two incidents.

Stage 4: Preplanning – There is recognition of the problem, and leaders are identifiable, but there is little planning for addressing problems and risk factors.

Stage 5: Preparation – Planning is going on and focuses on practical details. Funding is being sought by the active leaders.

Stage 6: Initiation – Enough information is available to justify a prevention program. Great enthusiasm exists as program begins.

Stage 7: Institutionalization – More that one prevention program is running with support and with trained staff. There may not be permanent funding.

Stage 8: Confirmation/Expansion – Standard programs are viewed as valuable; new programs are being developed in order to reach out to the populations more at risk. Evaluation of efforts is regular and more sophisticated.

Stage 9: Professionalism – Detailed and sophisticated knowledge of prevalence, risk factors, and program effectiveness exists. Programming is tailored to meet special needs and risk factors. Staff is highly trained.

From Edwards, Jumper-Thurman, Plesred, Oetting, and Swanson, 2000.

In Summary

Effective and sustainable prevention efforts should be based on adequate internal and external resources at the organization or coalition level. Moreover, your prevention programs can be successful only if developed within the context of community readiness for substance abuse prevention. Achieving community readiness often depends on involving key stakeholders in your efforts.

There are a variety of tools available to help prevention practitioners assess capacity and readiness (see resources section). Once you know your existing internal and external resources, you can then direct your efforts toward increasing readiness and building capacity as needed. The "Guide for Internal Capacity Assessment" in figure 2.1 provides additional considerations for assessing organizational capacity.

Reviewing the *PATHWAYS* logic model at the beginning of this chapter will remind you of the importance of developing capacity in the overall *PATHWAYS* process. This will help you determine if you have all of the resources you need to make an informed selection of a prevention program or practice—the next step in the *PATHWAYS* process, to be discussed in chapter 3.

Resources and References

Area Health Education Center (AHEC) Network offers community/coalition building resources at: www.ahecpartners.org/community/resources/index.shtml

Arts Wire SpiderSchool at New York Foundation for the Arts (NYFA) provides information and training for nonprofits on how to integrate technology into their work. A technology assessment tool is available at: www.artswire.org/spiderschool/workshops/planning/inventory.html

Community Anti-Drug Coalitions of America offers technical assistance, media strategies, and coalition development: www.cadca.org

Community Toolbox is a Web site (http://ctb.lsi.ukans.edu/) created and maintained by the University of Kansas Work Group on Health Promotion and Community Development in Lawrence, KS, and AHEC/Community Partners in Amherst, MA. The site provides "how-to tools" as well as links to hundreds of other Web pages and listservs in areas such as funding, health, education, and community issues. See especially Part H, chapter 27: Cultural competence in a multicultural world. Retrieved Nov. 28, 2001, at: http://ctb.lsi.ukans.edu/tools/EN/chapter_1027.htm

Edwards, R.W., Jumper-Thurman, P., Plesred, B.A., Oetting, E.R., & Swanson, L. (May 2000). Community readiness: Research to practice. *Journal of Community Psychology, 3*.

The Foundation Center provides education and training on the grant seeking process: www.fdncenter.org/

Lusthaus, C., Anderson, G., & Murphy, E. (1995) *Institutional assessment: A framework for strengthening organizational capacity for IDRC's research partners.* Ottawa: International Development Research Centre.

National Center for Service Integration. *A matter of commitment: Community collaboration guidebook series* [Online series of 14 commissioned guidebooks on essential components of comprehensive community reforms]. See especially:

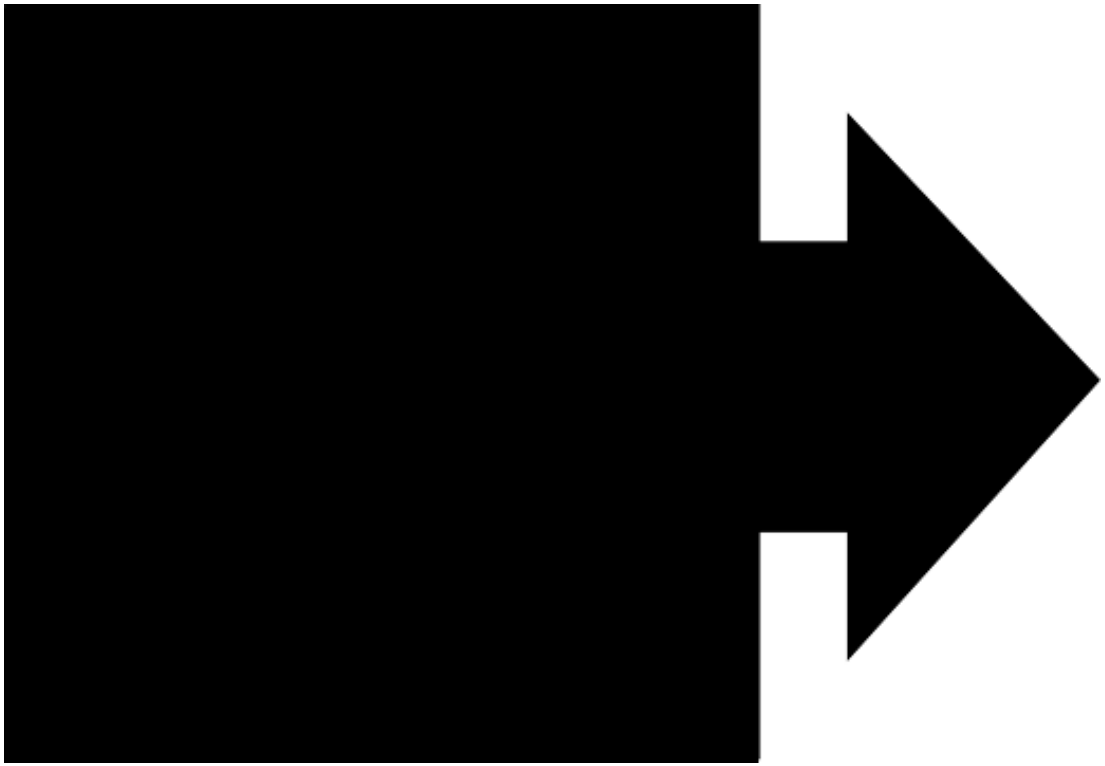
- Guidebook 2: Defining the prize: From agreed-upon outcomes to results-based accountability. Retrieved Nov. 28, 2001, at: www.cfpciowa.org/pdf/GB2DefiningthePrize.pdf
- Guidebook 3: Valuing diversity and practicing inclusion: Core aspects of collaborative work. Retrieved Nov. 28, 2001, at: www.cfpciowa.org/npnpvdABS.shtml

National Clearinghouse for Alcohol and Drug Information offers resources on multiculturalism: http://store.health.org/catalog/

Sen, R., & Klein, K. (March 2003). Stir it up: Lessons in community organizing and advocacy. Jossey-Bass.

Chapter 3

Select/Adapt/Innovate Programs



Introduction

By now you have completed a thorough and well-crafted needs and resources assessment and have identified the substance abuse problem(s) affecting your community, the specific population(s) who are contributing to the problem(s) or are at risk, and the risk and protective factors relevant to the identified population(s). If you are a coalition, you and your coalition partners have taken this information, searched the literature, and developed a theory about how change specific to your geographic area of interest will take place. Each of your partners will be working collaboratively to develop a theory of change relevant to their role in effecting area-wide change. Likewise, if you are not a formal coalition, but are contemplating a comprehensive program across several domains and intend to collaborate with community agencies, your theory of change will incorporate the role of each of your collaborators. If you are contemplating your prevention efforts as a single service provider, your theory will define how change in the underlying risk and protective factors will reduce or prevent substance use for your target population(s).

Now it is time to develop a plan for addressing the problem(s) you have identified. If you are a single practitioner, this plan might involve a single program. If you are a coalition, you will be looking at multiple programs*: the multiple approaches over multiple domains strategy. Coalition members (for example, a school system or a segment of the faith community) might want to look at a specific program; the coalition as a whole might consider environmental programs aimed at changing community norms about the identified problem(s).

Whatever your approach, your chances for achieving positive outcomes will increase if your programs are evidence based and adhere to the following standard:

- They are directly responsive to your needs assessment.
- They build upon an established theory of change.
- They are composed of elements and activities related to that theory.
- They have demonstrated positive outcomes in different settings over time.

**As used throughout this publication, the term "program" refers to the sum total of organized, structured interventions, including environmental initiatives, designed to change social, physical, fiscal, or policy conditions within a definable geographic area or for a defined population.*

Program Selection

- Identify which programs address the theory, or theories, of change suggested by your needs/resources assessment and gap analysis.
- Determine how the results of the program you are considering fit your goals and objectives and the culture and characteristics of the population to be served.
- Assess the resources you will need (human, technical, and financial).
- Repeat this process for all programs you are considering, so you can compare pros and cons of each program.
- Select a program*.

Evidence-based Programs

An evidence-based program is one that is theory driven, has activities related to the theory of change underlying the program model, has been well implemented, and has produced empirically verifiable outcomes, which are assumed to be positive.

Your best chance of selecting a program that meets those standards is one that has been designated by SAMHSA as a *model program* through its National Registry of Effective Prevention (NREP). Model and effective programs are SAMHSA's gold standard. They share good theory and program components linked to that theory, implementation standards that have been replicated over time, and good evaluation methodology that has consistently documented positive outcomes. In short, their effectiveness is scientifically defensible. Model programs are particularly attractive because their developers have put together the materials necessary for "off-the-shelf" implementation. In many cases, the developers also are available for consultation and technical assistance. Listings of these programs are available on SAMHSA's Web site at www.modelprograms.samhsa.gov. (Other organizations also rate substance abuse prevention programs, but many ratings are not ongoing or as rigorous as the standards set for SAMHSA's NREP.)

SAMHSA's NREP also categorizes substance abuse prevention/reduction programs as "promising." While promising programs have not been as rigorously implemented/evaluated as effective and model programs, the quality of design and research is of sufficient rigor that positive outcomes are observed and the programs are included in SAMHSA's registry of evidence-based programs.

Evidence-based programs are best because they are theory driven, have activities related to the theory of change underlying the whole program model, and have been reasonably well implemented and well evaluated. They have been shown to produce empirically verifiable outcomes, which are assumed to be positive. This is important to funders, your community, and the field as a whole. However, this should not discourage program developers and coalitions from innovation. Your job in documenting outcomes may be more difficult, but you will have contributed new approaches and new ideas to the field. Moreover, there may not be an appropriate evidence-based program available for your specific conditions. Developing a new program, while difficult, could be worthwhile.

This chapter outlines how you will use your initial theory, or theories, of change to select a program(s). The process is also valuable for innovators and coalitions. Selecting domains of concentration, prioritizing risk and protective factors, and assessing resources will help focus your work so that your innovative, evolving program might soon be eligible for an NREP rating.

If your program was pre-selected because of funding mandates or other requirements, you should still familiarize yourself with the contents of this chapter. The discussions of program criteria and fidelity and adaptation, in particular, will enhance your ability to implement a successful program.

Important Terms

Adaptation: Modification made to a chosen program (e.g., qualitative and/or quantitative changes to components); changes in audience, setting, and/or intensity of program delivery. Research indicates that adaptations are more effective when (a) underlying program theory is understood; (b) core program components have been identified; and (c) both the community and the needs of the population of interest have been carefully defined.

Core Components: Program elements that are demonstrably essential to achieving positive outcomes.

Effective Program: In SAMHSA's terminology, a program that builds upon established theory, comprises elements and activities grounded in that theory, demonstrates practical utility for the prevention field, has been well implemented and well evaluated, and has produced a consistent pattern of *positive* outcomes.

Evidence-based Program: A program that is theory-driven, has activities related to the theory of change underlying the program model, has been well implemented, and has produced empirically verifiable outcomes, which are assumed to be positive.

Evolving Program. A program that is theory driven, has activities related to its underlying theory of change, and has an ongoing evaluation mechanism. While there may be anecdotal or even documented evidence of outcomes, the program has not been subject to a rigorous evaluation that includes at least one methodologically sound and reasonably well-implemented effectiveness trial.

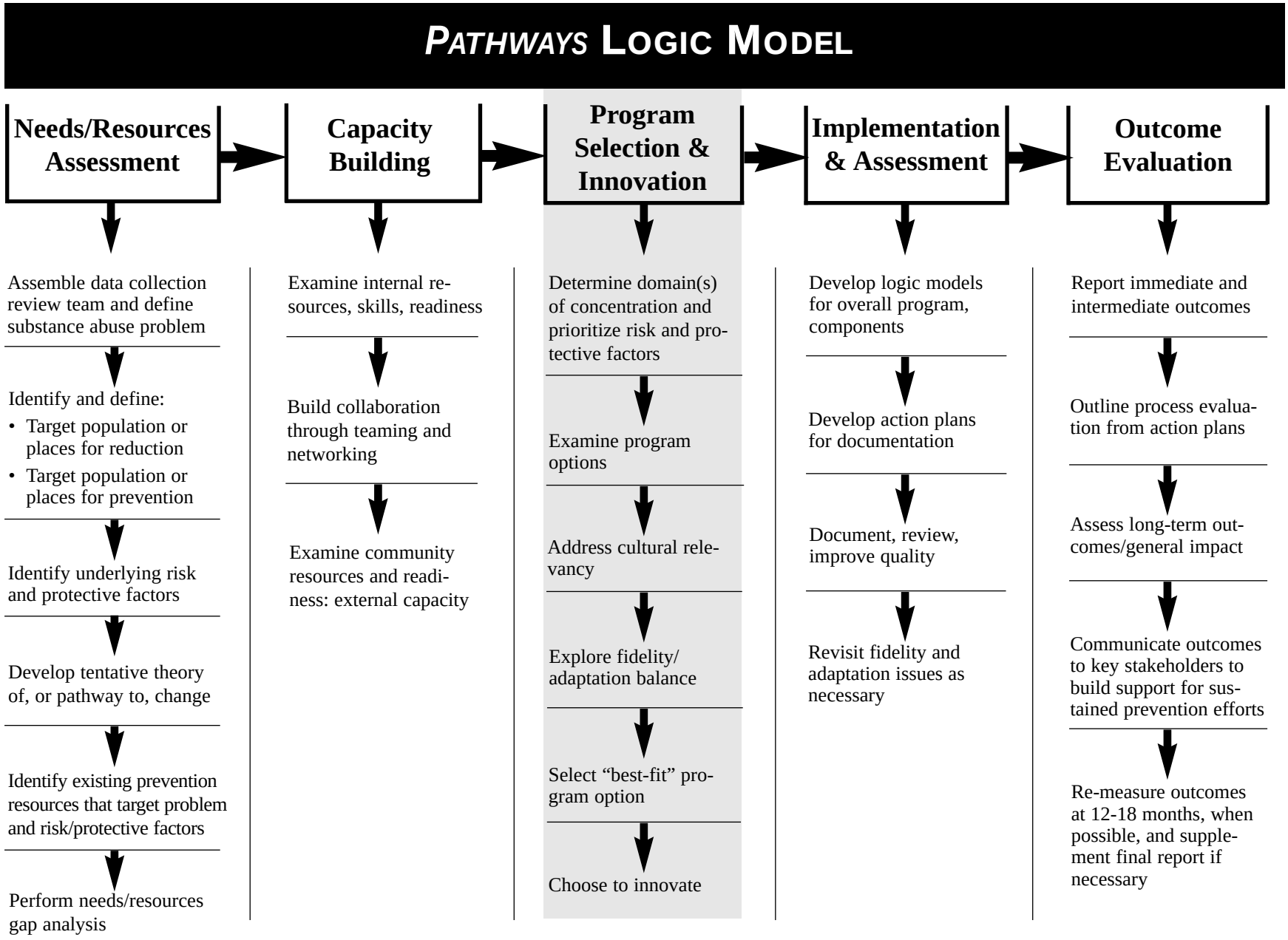
Fidelity: In operational terms, the rigor with which a program adheres to the developer's model.

Innovate: As used in this publication, to develop a new program according to a systematic approach that includes needs and resources assessment, capacity review and development, rigorous implementation, and thorough evaluation involving control groups.

Model Program: In SAMHSA's terminology, model programs have all of the positive characteristics of effective programs with the added benefit that program developers have agreed to participate in SAMHSA-sponsored training, technical assistance, and dissemination efforts.

Promising Program: Promising programs are those that have been reasonably well evaluated, but the positive findings are not yet consistent enough, or the evaluation not yet rigorous enough, for the program to qualify as an effective program.

PATHWAYS Program Logic Model



Logic Model Discussion for Program Selection

The program logic model on the previous page shows how chapter 3 (the shaded area) fits into the overall *PATHWAYS* framework. The activities and tasks that make up the program selection/innovation component of the *PATHWAYS* process are described below. You will find more information about logic models and their role in achieving outcomes in chapter 4.

Program Selection/Innovation Action Steps

- **Determine Domains of Concentration and Prioritize Risk and Protective Factors**
  - If domains have not been pre-determined, then:
    - Guided by your initial theory of change, prioritize the risk and protective factors that characterize your prevention and/or reduction goal
    - Select domain(s) after considering:
      - Prioritized risk and protective factors
      - Capacity
      - Community resources
  - Adjust your theory of, or pathway to, change to reflect your domain(s) of concentration and additional assessment

- **Examine Program Options**
  - Using a variety of resources, especially SAMHSA's National Registry of Effective Programs (NREP), examine each program option for fit with:
    - Your theories of change, goals, and objectives, and the social and cultural characteristics of your defined population
    - Your human, technical, and financial capacity
    - Other programs already available

- **Address Cultural Relevancy**

- **Explore Fidelity/Adaptation Balance**
  - Understand the theory behind each option
  - Locate a core components analysis for each option, or contact a developer, skilled evaluator, or other implementers for their implementation experiences
  - Determine what adaptations may be necessary, given your identified population, community environment, and capacity

- **Select Best-Fit Option**
  - — Develop a general logic model of the program(s)
  - — Consult with the organization and/or community in which implementation will take place
  - — Develop a general action plan to identify potential implementation problems

- **Choose to Innovate (when there is consensus that the fit between existing evidence-based programs and targeted population or community-wide needs does not exist)**
  - — Re-examine risk and protective factors for your population(s) or community of interest
  - — Develop a program(s) based on a theory(ies) of change well supported by prevention literature
  - — Review SAMHSA's logic models of promising, effective, and model programs
  - — Engage a skilled evaluator for assistance with short- and long-term evaluation designs

Steps to Facilitate Selecting/Innovating a Program

As described in chapter 1, a well-executed, comprehensive needs assessment will enable you to establish a theory (or theories) that explains the relationship(s) among the underlying risk and protective factors of your identified population or geographic area of interest and how those factors or conditions contribute to substance abuse problems. You are now ready to think seriously about a program* or several programs across domains, your capacity permitting.

You may find a program(s) that matches your needs almost perfectly if it could be slightly altered. For example, there might be a school-based program that you think is well suited to your afterschool group. In situations like this, you may need a skilled evaluator to help you determine which program(s) can be adapted most successfully to fit your needs without jeopardizing the components that account for its effectiveness. This is the process of balancing fidelity and adaptation. You may also find that your needs can not be met by an existing program, even with adaptation. If you opt to develop your own program and seek to demonstrate its effectiveness, be sure that your effort is anchored with a clear and documentable theory of change, with links between assumptions, activities, and anticipated outcomes; that implementation is carefully tracked and documented; and that your evaluation design and its implementation are as rigorous as possible.

The following steps will facilitate program selection and innovation that will eventually "value add" to the prevention field and ease both your implementation and your evaluation burdens:

1. Examine which programs address the underlying conditions suggested by your needs assessment. The resources section at the end of this chapter includes information to help you identify potential programs.
2. Determine how the underlying logic—from assumptions to activities—fits the underlying conditions. Long-term outcomes should match your goal(s); the immediate and intermediate outcomes should closely match your objectives.

**As used throughout this publication, the term "program" refers to the sum total of organized, structured interventions, including environmental initiatives, designed to change social, physical, fiscal, or policy conditions within a definable geographic area or for a defined population.*

4. Make sure that your choices reflect the characteristics of the population and community to be served. Not every program will fit the cultural characteristics of your community.

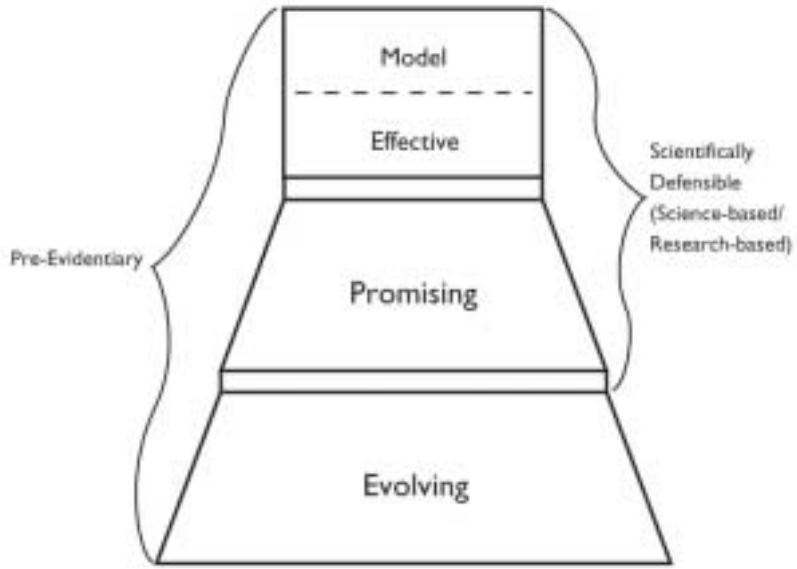
5. Contact other groups that have implemented the program for information about their experiences. If you are considering an NREP model program, the program developer can help you locate these groups.

6. Assess the organizational and community resources you will need. Review chapter 2 to help determine if your organizational capacity—human, technical, and financial—and the "readiness" characteristics of your community match the requirements of the program you hope to implement. Costs of the proposed program, or implementation resources beyond your capacity or your community's level of readiness, will suggest bypassing that program in favor of another, or, perhaps, selecting a program that addresses community readiness as your first step in a more comprehensive approach.

7. Repeat this process for other programs you have identified as potentially viable for your needs. You can then compare the pros and cons.

8. Working with a skilled evaluator, make the selection. Amend your theory of, or pathway to, change if necessary (and appropriate) to facilitate selection.

Figure 3.1 Levels of Effectiveness



Substance abuse prevention has evolved considerably in recent years. It is now possible to select prevention programs that address specific populations, risk and protective factors, and outcomes. The foundation of prevention is evidence-based knowledge—knowledge that has been studied, tested, or researched using the tools or process of scientific inquiry. Programs that are evidence based are almost universally theory based. This means that they are grounded in well-developed concepts about how and why the program should work. Further, they have been at least reasonably well evaluated, so you can rely on their effectiveness.

Figure 3.1 illustrates the ranking system used by SAMHSA's NREP process. It includes space for *evolving programs* that have not yet met the

qualifications for saying the evidence base has been validated through rigorous science/evaluation. Evidence-based programs that have met the test of acceptable scientific rigor and that show some positive outcomes, but that are not consistent over time, are called *promising programs*. The more proven science-based programs are defined as *effective programs* because they produce consistently positive outcomes. Science-based programs that are available for dissemination and provide access to technical assistance through the program developer are known as *model programs*.

Selecting a model program, if one is appropriate or can be adapted to your identified population and its risk and protective factors (reflected in your theory of, or pathway to, change), is usually preferable. These programs are listed in a SAMHSA report, titled "Annual Report of Science-Based Prevention Programs." They are also available online at www.modelprograms.samhsa.gov/

But what if you cannot find an effective or model program to meet your needs or specific objective(s)? In such a case, you might consider selecting a promising program or even developing a unique program to meet the needs in your community. If you do select a promising program rather than an effective or model program, using the *PATHWAYS* process to document your outcomes could help the field move promising programs closer to effective status.

Of course, you may decide to implement an undocumented or innovative program of your own. This is acceptable as long as you understand the additional heavy burden of documentation and evaluation using separate comparison or control series data if you wish to become part of the evidence-based movement in prevention.

If you have a choice, however, there is much to recommend programs that have been successfully replicated across venues and populations. Programs that are in earlier stages of replication may be more difficult to assess in terms of clear outcomes. And, while needed to advance the field, demonstrating positive outcomes for innovative and promising programs, compared to those that have already been rigorously evaluated, increases your evaluation burden.

Determine Domains of Concentration

As discussed in chapter 1, your assumptions about how and why the change(s) you desire will occur are known as your theory (or theories) of change. (Remember, a theory of change can be described as a pathway to change.) Once you have established a theory to explain the relationship among the underlying conditions that characterize your identified population, place, or policy change and how they contribute to the substance abuse problem, you can examine program(s) to address those specific conditions. Chances are that your theory, or theories, of change encompass(es) risk and protective factors from several of the domains discussed in chapter 1. Current research indicates that the most successful prevention efforts are those that work across multiple life domains.

In general, a comprehensive approach is easier for coalitions than for an individual organization or agency. Having several collaborative partners with proven track records in different domains makes it possible to probe for a more comprehensive picture of the risk and protective factors you will be addressing as you refine your theory, or theories, of change. Such a partnership also enables you to approach several domains simultaneously. If, however, you are a new coalition, or a single service provider, it may be wise to focus your prevention effort on only one or two domains at a time. How will you make an informed choice about domain focus? Here are three factors to consider:

1. The priorities among the risk and protective factors that have been identified for your identified population;
2. Your capacity to work effectively within the domain(s) suggested by the prioritized risk and protective factors; and
3. Your assessment of the domain(s) in which (given staff and financial capacity) you are most likely to produce the desired change.

Think back to example A in chapter 1 about the middle school boys who were substance abusers and who shared a range of risk factors—poor school performance, dysfunctional family life, and negative peer influences. Which of these factors should be the focus of your effort?

Example: "Unidos Family Life Center"

The Unidos Family Life Center has been working successfully with families struggling with the effects of alcohol abuse. The Life Center worked with school administrators to identify middle school boys who were using alcohol and were members of Life Center families. The Life Center team recognized that school performance was certainly an important domain to address, but that it was beyond the Life Center's capacity. The Life Center team chose to stay in its area of expertise—the family domain. The Center expanded its involvement with families, using its best outreach efforts to include the families of all the middle school boys involved in the troublesome behavior, as well as the middle school children of other Life Center participants. The Life Center also established closer ties to the county coalition. Although Life Center staff chose not to affiliate with the coalition, they recognized that reciprocal information sharing and referrals might help both the coalition and the Center fulfill their missions.

Consider, on the other hand, that your coalition supports an afterschool initiative that has focused successfully on positive youth development. As a concerned community group, you, too, wish to be helpful to these middle school boys. The family domain holds no promise for you at this time, but you have had considerable success with an afterschool citizenship development program for young people in grades six through nine. Some of your success comes from the hands-on, problem-solving projects that typically connect youths with their civic mentors from local governments and public sector agencies.

School administrators have reported the positive effects your program has had on many facets of school life. In fact, the schools and parents are encouraging you to expand the use of high school tutors and continue to require ongoing academic skill building as a condition for civic internship. Further, your staff has done its homework and has suggested that outreach to the middle school boys be accompanied by comprehensive educational assessment. The result of this assessment could aid your decisions about the adequacy of the present tutoring program for the needs of this particular population. If the present tutoring program is adequate for the needs of most of the boys, outreach and recruitment of those boys for this program should be a priority. Besides, your staff argues, if you are successful in the school and community domain, negative peer influences might well be diminished without specific program.

Evidence-based Options:

Using SAMHSA's National Registry of Effective Prevention (NREP), review evidence-based program options that fit

- Your theories of change, goals and objectives;
- The social and cultural characteristics of your population; and
- Your human, technical, and financial capacity.

Prioritize Risk and Protective Factors Within Your Domain of Concentration

Whether you are one of several partners in a coalition, an informal participant in a partnership, or a single agency provider, you will want to know as much as you can about the strengths and weaknesses of your particular population or geographic area of interest. The more carefully you have identified your population or place, the more likely you are to select the most appropriate program. Even if your program was predetermined in a grant award, you should complete the individual-level assessment, concentrating on the needs and resources within the domain in which you will be working. Otherwise, you will not be fully informed when you come to the inevitable decisions about adaptation.

When you are satisfied with the quality and specificity of your individual-level data for the identified population in the domain(s) you have chosen, prioritize the risk and protective factors. As you did when choosing your domain(s) of concentration, you should consider the relative importance of the risk and protective factors, your group's capacity, and where you think your efforts will be most successful. You are now ready to adjust your initial theory, or theories, of change to reflect your sharpened focus.

Examine Your Program Options

Examine the programs that are available for the domain you have chosen. You can locate these through a literature search that includes the following Web sites: http://preventionpathways.samhsa.gov/ and www.modelprograms.samhsa.gov/. Different agencies have differing definitions for evidence-based programs. You will find SAMHSA's *Annual Report of Science-Based Prevention Programs* to be helpful in your selection effort. The report links model programs identified by SAMHSA to domains and to their risk and protective factors. SAMHSA's CSAP continues to work with program developers to move promising programs into the effective and model categories. Therefore, the number of model programs increases regularly. Nonetheless, you may not have the resources to implement one of NREP's effective evidence-based programs, you may not find one that meets your needs, or you simply may wish to develop or use another. Keep in mind that if you wish to become part of NREP's registry at some point, your program should be theory driven and systematically implemented and evaluated.

Address Cultural Relevancy

Determine how the characteristics of the programs you are considering fit the individual needs of your identified population or place, your adjusted theory of, or pathway to, change, and your consequent goals and objectives.

It is important that the program be culturally relevant for your purpose. A program designed to prevent alcohol and drug abuse for urban African-American youth may not be a good fit for Hispanic youth from migrant farm families.

When considering cultural relevance, take into account the community's values and existing practices and the culture and characteristics of the identified population. For example, well-baby and home visit support programs for teen mothers may not fit into a context in which young mothers are suspicious of social workers. Some young mothers may not allow social workers into their homes for fear that their babies will be removed. If you were considering this program, you would want to identify leaders within the culture you have defined to help you assess the probable reaction to such a program and recommend ways to increase its acceptance.

Here are some considerations for assessing the cultural fit of a program:

- Consider the cultural context and readiness of the identified population. Are they aware of, and knowledgeable about, the problem?
- Consider the values and traditions that affect how your identified group regards health promotion issues. What do they consider to be appropriate ways to communicate and provide helping services?
- Consider the extent to which the community is ready for the program (chapter 2). Are they willing to accept help and/or programs that ask for changes in their behavior, attitudes, and knowledge? What is their level of resiliency and their capacity to make these changes?

- Determine whether the proposed program is appropriate given the cultural context and community readiness issues. What modifications/adaptations are needed? Consider the cost and feasibility of these adaptations/modifications (e.g., the cost of translating an entire curriculum into another language).

  SAMHSA's Model Programs Web site (www.modelprograms.samhsa.gov) notes which programs have proven effective with different populations as well as which have translations and/or other cultural adaptations.

- Consider how this program fits with other programs that are already being offered to the group you will be serving. Do similar programs exist? Are they complementary to yours? Do they work at cross-purposes?

Explore Fidelity and Adaptation Needs and Balances

Communities differ, of course, and you may not find an exact match between a program and the needs of your community or population. You may, however, find a program that you feel could be adapted to fit those needs. It is important that you take care before adapting an evidence-based program. Your changes could affect the outcomes. The need to adapt programs to fit local needs while addressing the developer's concern that such changes might cancel the program's demonstrated effectiveness is called the fidelity/adaptation balance.

Finding an appropriate balance between *fidelity* (the degree to which a program adheres to the developer's model) and *adaptation* (modification to a chosen program) can be a real challenge. Researchers and program developers are legitimately concerned that changes to an evidence-based program will dilute or even dissipate its effectiveness. Practitioners are concerned that a "one-size-fits-all" formula may not match actual community needs.

It is widely accepted that evidence-based prevention programs must be implemented with a certain level of fidelity to their developer-defined *core components*, but that there must also be latitude to adapt the program to meet individual community circumstances. A series of discussions with developers and implementers alike confirms that belief and yields additional information. (See "Finding the balance: An implementer's guide to program fidelity/adaptation." CSAP, 2003, in print, part of a series of implementation publications.)

Developers differ in their approach to, and acceptance of, adaptations. In general the more narrowly drawn and curriculum driven the program is, the less acceptable are adaptations, except for essential purposes like cultural appropriateness or language comprehension. Most developers agree that "good" adaptations (e.g., those that increase the power of the materials to communicate with cultural appropriateness, language comprehension, and illustrative examples) either are neutral or enhance outcomes. "Bad" adaptations (e.g., insertions of old or extraneous material, reduction in number, purpose, or intensity of sessions) have a negative impact on outcomes.

One program developer points out that if the facilitator adds his/her values and feelings, it really hurts the program. Switching the order, or sequencing, of content; cutting the number of prescribed trainers;

cutting session time; and eliminating non-curricular elements such as meals, child care, and incentives for homework completion are other adaptations that could diminish or detract from expected program outcomes.

The developers also observed that outcomes can be affected by the personality and delivery methods of the facilitator. Many commented that one of the more consistent threads throughout all of the programs is the idea that particular teaching methodologies, especially the didactic (lecture) method, are less effective than the interactive methods. Some teachers are natural learning facilitators and perform in this role with great ease, while others have difficulty. In general, the highest degree of fidelity occurs when a program is presented by people whose sole purpose is delivery of the program.

Many developers use a cooking analogy when discussing fidelity and adaptation, suggesting that the program is a recipe that experienced cooks can adjust without damaging the outcome, but inexperienced cooks need to follow exactly. Continuing that analogy, consider how just the smallest addition (or deletion) of an ingredient can ruin the final results.

The following steps should help you balance fidelity in an evidence-based prevention program with the adaptation you need to accommodate local needs:

1. Define what you mean by fidelity/adaptation balance, and share your definition with everybody who is collaborating on the program's implementation.
2. Assess community concerns about fidelity/adaptation with everybody who is collaborating on the program's implementation.
3. Conduct a review of the program with the developer and other implementers to help determine fidelity/adaptation issues.
4. Further refine fidelity/adaptation issues by analyzing the program's theory of change, logic model, and core components.
5. Determine what resources may be needed to deal with fidelity/adaptation issues, and how to present the need for these resources to funders.

6. Look at the training the program developer offers that might help you address fidelity/adaptation issues.
7. Determine whether an individualized program developer consultation on fidelity/adaptation issues might be feasible and useful.
8. Define how you will document your efforts to address fidelity/adaptation issues, including whether you will use the program developer's fidelity instrument, if there is one. A fidelity instrument is a written form that gathers information about fidelity/adaptation balance, usually as a series of checklists for assessing the degree or quality of implementation.
9. Involve the community in addressing the fidelity/adaptation issues you've identified.
10. Weave results from all these steps into a plan for addressing fidelity/adaptation balance and make this part of your overall implementation plan.
11. Include fidelity/adaptation issues in the design of the program's evaluation strategy.
12. Incorporate an ongoing process for addressing fidelity/adaptation issues that are likely to come up after the program has been implemented, and throughout its lifetime.

Select the "Best-Fit" Program Option

Three periods of development have affected the evolution of substance abuse prevention programs. The first period was driven by common sense, ideology, or intuition. A number of good ideas emerged from applying intuitive thinking to prevention; however, intuitive or innovative ideas alone do not always produce effective methods of prevention.

The second period involved the development of programs based on theory from other content areas. Social psychologists, sociologists, developmental psychologists, and researchers grounded in public health issues drew on their respective disciplines to create a matrix of theoretical support for many programs, but the lion's share of the actual research was only indirectly related to substance abuse.

The third and current period is distinguished by a significant body of research. Much of what we now know about prevention is data driven as well as theory based. This means that the developers of many evidence-based programs are able to measure change as it applies to each of the components of their programs, as well as to demonstrate positive outcomes at program conclusion. The most rigorously evaluated programs among the evidence-based group—those that are effective or model—have used control groups for comparisons and can attribute positive outcomes directly to the program.

In fact, the programs that have been most rigorously evaluated (effective and model programs as identified on SAMHSA's model program Web site—www.modelprograms.samhsa.gov) can demonstrate positive outcomes that are achievable for different populations in different settings.

Selecting a program from among SAMHSA's identified effective and model programs provides you with two immediate advantages. First, if you have been thoughtful about linking the needs of your identified population or area of interest to the selection of an effective or model program, and you implement that program with fidelity to its core components, your ability to produce positive outcomes is almost assured. Second, in a related vein, your evaluation is much easier. The program developer has already used control groups to demonstrate that outcomes were directly related or attributed to the program and not to other conditions. Not only are you more likely to produce positive outcomes if your selection is from among SAMHSA's effective or model programs, but you need not worry about a control group.

Note, however, that if you are part of a demonstration project or other type of special research, you might be compelled to use a control group or comparison group as part of your research design.

Keep in mind that effective evidence-based programs, although theory based and therefore related to a body of knowledge about substance abuse, have not been evaluated with equal rigor. This means that the more removed your selection is from a recognized effective or model program, the more rigorous you should be in evaluating your outcomes.

As you select your "best-fit" option, the following steps should guide your decision:

- Develop or review, as appropriate, a logic model of the program.
- Consult with the broader community outside the coalition in which the implementation will take place to ensure that community readiness and capacity are in place.
- Develop a plan of action—the steps you will follow to implement the program (more information on logic models and action plans can be found in chapter 4)—to identify potential implementation problems.

Choose to Innovate

As was pointed out earlier in this chapter, selecting an evidence-based program that has shown positive outcomes and perhaps has been implemented and evaluated in a variety of venues simply makes good sense. This is especially true if the selected program is one that has been rated by SAMHSA and is listed in the National Registry of Effective Prevention (NREP) on SAMHSA's Web site. If your needs assessment data indicate that one of these programs is a good "fit," or can be adapted appropriately, then your chances for positive outcomes are greatly enhanced.

However, it may be that there is no NREP-listed model, effective, or promising program to fit your selected population's risk and protective factors, or there may be capacity issues that dictate against such a choice. Additionally, you may wish to expand the field, either to fill the void you found, or simply to share innovative ideas. In such instances, practitioners and coalitions may decide to *innovate*, to develop a new program. This is helpful to the field if carried out in a rigorous, scientific fashion because it will lead to a larger pool of evidence-based programs available to all practitioners.

Innovation, however, can be difficult, and you should be sure that you have the capacity to do it properly before taking on the task. Any program that you develop or adapt must be carried out systematically. It is not innovation and does not contribute to the field, to the body of evidence-based approaches, if it is not done properly. Innovations require careful attention to needs and resources, a theory of change well grounded in previous research, development of elements and activities related to that theory, and consistent, carefully designed evaluations. Reviewing the logic models of NREP-listed programs as preparation for your own innovative approach will enable you to understand the steps involved in moving from your theory of change through the activities that will lead to final outcomes. Refer also to Chapter 1 to see how this works. If you are using a skilled evaluator, he or she should be able to help ensure that your program design is valid.

Note that in some instances there are programs, usually designed for a small group of individuals, that may not qualify as evidence based, but that do no harm and may even work to expand the horizons of the target group. It is important to understand that while such programs cannot add to the field overall if they do not follow the evaluative process such as the one outlined in this *PATHWAYS* process, their developers may not be interested in an evidence-based designation.

In Summary

Fortunately, because of the growing body of research and evaluation in this field, we can now make more informed decisions about the critical step of selecting prevention programs that are likely to lead to meaningful change in our communities. SAMHSA's Center for Substance Abuse Prevention (CSAP) has played a major role in recent years by identifying programs that have demonstrated successful outcomes. Your best solution most likely will be to choose programs that have been successfully replicated across venues and populations, demonstrating credibility, utility, and an ability to generalize. However, innovation may be the option you choose, especially if an NREP-designated program cannot be found and/or adapted to meet your community's needs.

Now it is time to put all of this into practice. It is time for implementation and evaluation—the components covered in chapters 4 and 5.

SAMHSA Resources

SAMHSA-related Web sites:

Center for Substance Abuse Prevention/National Center for the Advancement of Prevention
http://preventionpathways.samhsa.gov/

Centers for the Application of Prevention Technologies: www.captUS.org

SAMHSA model programs: www.modelprograms.samhsa.gov/

A number of useful SAMHSA reports and publications are available through the National Clearinghouse for Alcohol and Drug Information (NCADI), P.O. Box 2345, Rockville, MD 20847. A full list is available at http://store.health.org/catalog/.

2002 annual report of science-based prevention programs and principles.
Available: www.preventiondss.org

2002 comparison matrix of science-based prevention programs. Available: www.preventiondss.org

Prevention Enhancement Protocol Systems (PEPS) Series systematically evaluates research and practice evidence on substance abuse prevention. Available:
http://text.nlm.nih.gov/ftrs/dbaccess/csap

Preventing problems related to alcohol availability: Environmental approaches reference guide. (1999). Washington, DC: Substance Abuse and Mental Health Services Administration.

Preventing substance abuse among children and adolescents: Family-centered approaches reference guide. (1998). Washington, DC: Substance Abuse and Mental Health Services Administration.

Reducing tobacco use among youth: Community-based approaches. (1997). Washington, DC: Substance Abuse and Mental Health Services Administration.

Resources and References

Brounstein, P.J., Zweig, J.M., & Gardner, S. (2002). *Science-based practices in substance abuse prevention: A guide*. Available: http://modelprograms.samhsa.gov/template.cfm?page=pubs_science

Centers for the Application of Prevention Technologies. *Science-based substance abuse prevention: A checklist of key characteristics of effective prevention interventions* [Online]. Retrieved May 1, 2003: www.captus.org/publications/publications.htm

Mulhall, P., & Hays, C. (n.d.) *Levels of effectiveness of science-based prevention* [Online]. Retrieved May 1, 2003: www.ccapt.org/levels.html

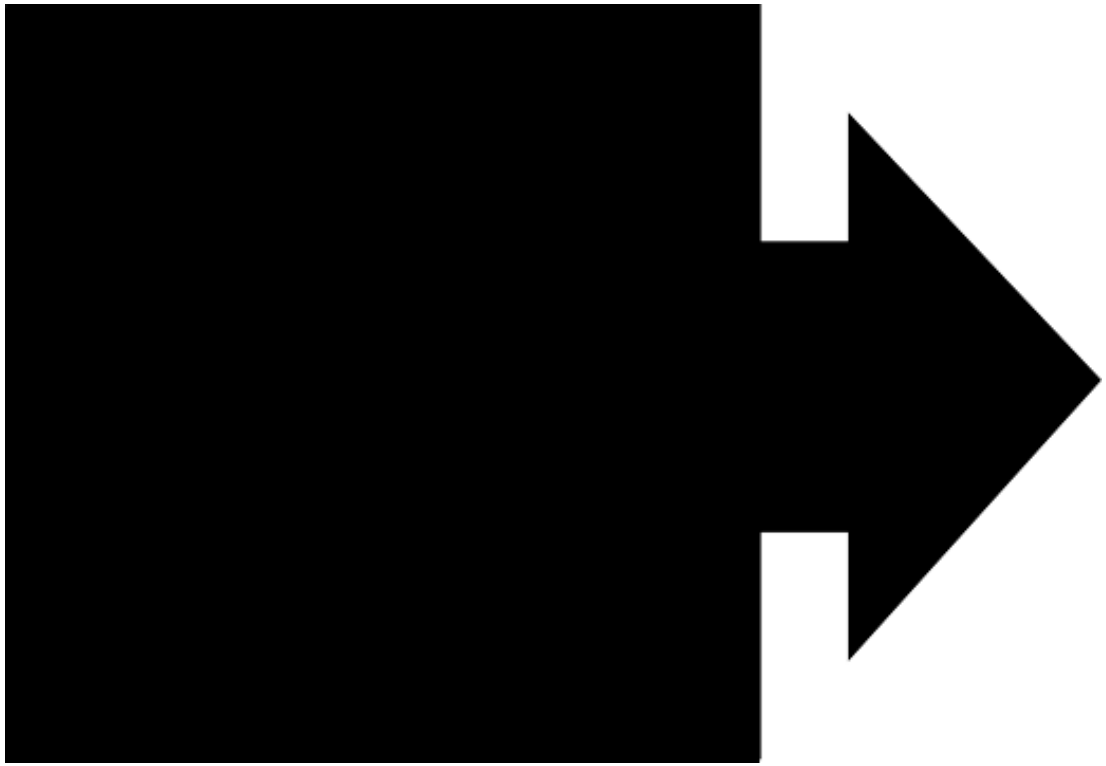
National Clearinghouse for Alcohol and Drug Information (NCADI): www.health.org

National Institute on Drug Abuse. *Preventing drug abuse among children and adolescents: A research-based guide* [Online]. Retrieved May 21, 2003: www.nida.nih.gov/Prevention/Prevopen.html

Office of National Drug Control Policy, prevention resources: www.whitehousedrugpolicy.gov/prevent/programs.html

Chapter 4

Implement and Assess Programs



Introduction

Your work so far brings you to the all-important process of implementing your selected program(s). You will see that good implementation involves much more than simply carrying out the components of the program. Planning and documentation are critical to the success of program implementation.

With good program implementation and clear documentation of program process and function, the decision makers in your organization maintain knowledge and control over what's happening throughout the program's implementation. They can immediately assess and react if and/or when something goes wrong. This requires extensive documentation. However, the good news is that this documentation ensures that your efforts will be consistently productive and it is unlikely that you will be faced with surprises (i.e., failure of anticipated outcomes and impacts). Finally, the ease with which you can complete your evaluation, if you have maintained proper documentation throughout the program, is quite amazing and well worth the extra time that the planning and ongoing documentation require.

There are two very useful tools that can be used to organize and maintain this necessary documentation. First, there is the logic model, which is a graphic depiction of the program that you have developed or selected for your identified population. If you have observed that the program logic model bears a close resemblance to your theory of change, you are absolutely correct. In fact, if you refer back to pages 25-28 in Chapter 1, you will see both a theory of change AND a program logic model in the making. Setting it up in a graphic format simply makes it easier to understand. The program logic model focuses on the overall program or coalition effort and what it is intended to achieve. Often a program developer will offer a logic model as part of the dissemination package. If you are using a SAMHSA evidence-based program, logic models are available on SAMHSA's Web site at www.modelprograms.samhsa.gov. If not, you will create a logic model for the program you are using or developing in order to

- guide you properly through the implementation process with respect for the fidelity/adaptation balance that will preserve the evidence base of the programs you are implementing, or, if you are innovating, establishes the theory of change you will soon be testing;

- ensure that your partners, staff, and community share a common understanding of what the program(s) is to achieve; and
- provide a credible framework for the evaluation you will soon be completing.

Most programs* have more than one component, more than one set of activities or objectives that contribute to goal achievement (see chapter 1, as well as the logic models in this chapter). This is because there is usually more than one risk and/or protective factor that needs to be addressed by the program, and each requires a different set of activities. If you take each of these steps, or components, individually and describe graphically what should be done to achieve the desired outcomes (which serve as the immediate or intermediate outcomes for the program overall), you will have component logic models as well. Breaking down the logic model into its components clarifies the implementation process for staff and facilitators and makes it significantly easier to complete an evaluation.

The second handy tool is the action plan, which is a working outline of the tasks you should complete to implement the components and the program logic model. The action plan outlines every task to be accomplished, who is responsible for each task, and the results after implementation. Action plans keep everyone informed about what is going on and provide the nuts and bolts for the evaluation report.

It is this extensive documentation during implementation that will provide the data needed to complete your evaluation. For example, if your immediate or intermediate outcomes are less than expected, the documentation process inherent in *PATHWAYS* will enable you to go back and see where adjustments might be made so you can ensure your final outcomes.

This chapter shows how logic models and action plans can be used to facilitate this critical documentation process. The discussion continues in chapter 5 as the evaluation process is completed.

**As used throughout this publication, the term "program" refers to the sum total of organized, structured interventions, including environmental initiatives, designed to change social, physical, fiscal, or policy conditions within a definable geographic area or for a defined population.*

Important Terms

Action Plan: Translates the theory of change represented by a logic model into an operational plan, detailing the key tasks that should be completed, including the measurement of outcomes.

Adaptation: Modification made to original plan for implementation and/or evaluation of a chosen program (e.g., qualitative and/or quantitative changes to components); changes in audience, setting, and/or intensity of program delivery, and in evaluating changes to research design, measures, or analysis.

Baseline Data: The initial information collected prior to the implementation of a program, against which outcomes can be compared at strategic points during, and at completion of, a program.

Component Logic Model: See Logic Model.

Continuous Quality Improvement (CQI): The systematic assessment and feedback of information about planning, implementation, and outcomes and use of this information to improve programs.

Core Components: Program elements that are demonstrably essential to achieving positive outcomes.

Fidelity: On a continuum of high to low, where high represents the closest adherence to the developer's design, the degree of fit between the developer-defined components of a substance abuse prevention program and its actual implementation in a given organizational or community setting. In operational terms, the rigor with which a program adheres to the developer's model.

Fidelity/Adaptation Balance: A dynamic process that addresses both the need for fidelity to the original program model and the demonstrable need for local adaptation.

Goal: The clearly stated, specific, measurable outcome(s) or change(s) that can be reasonably expected at the conclusion of a methodically selected program.

Immediate Outcome: The initial change in a sequence of changes expected to occur as a result of program implementation.

Impact: The long-term effect and/or influence of the program on the conditions described in baseline data.

Implementation Plan: As used in this publication, a planning tool for the program manager. The plan need not be more detailed than that required by the program manager to establish initial direction and clarity of vision for the implementation group.

Intermediate Outcomes: In a sequence of changes expected to occur in a program, the changes that are measured subsequent to immediate change, but prior to the long-term changes that are measured at program completion. Depending on the theory of change guiding the program, an intermediate outcome in one program may be an immediate or long-term outcome in another.

Logic Model: A graphic depiction of the theory of, or pathway to, change that provides the underlying rationale for a program. It includes the approaches and activities that specifically address the underlying risk and protective factors and specifies the expected immediate and intermediate outcomes, or objectives, and the expected long-term outcomes, or goals.

Long-term Outcomes: Over time, the permanent change(s) that result from the program.

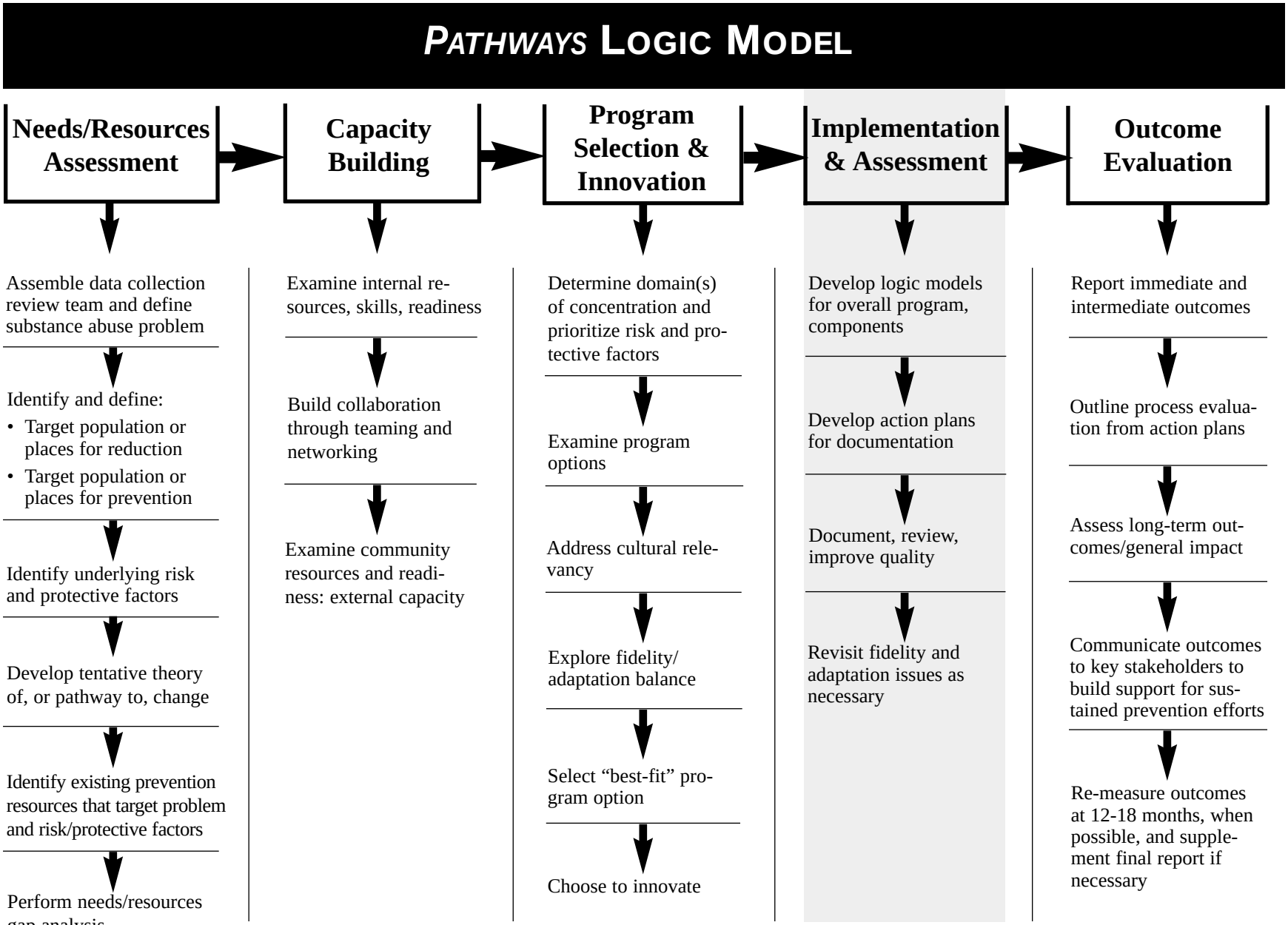
Objectives: As used in this publication, measurable statements of the expected change in risk and protective factors, or other underlying conditions, as expressed in the program's guiding theory of, or pathway to, change.

Outcomes: The extent of change in targeted attitudes, values, behaviors, or conditions between baseline measurement and subsequent points of measurement. Depending on the nature of the program and the theory of, or pathway to, change guiding it, changes can be immediate, intermediate, or long-term outcomes.

Process Measures: Measures of participation, "dosage," staffing, and other factors related to implementation. Process measures are *not* outcomes, because they describe events that are inputs to, or throughputs of, the delivery of a program.

Program Logic Model: See Logic Model.

PATHWAYS Program Logic Model



Logic Model Discussion for Program Implementation and Assessment

The *PATHWAYS* logic model on the previous page shows how the Implementation/Assessment component (the shaded column) fits into the overall framework for *PATHWAYS*. The activities and tasks that make up the program Implementation/Assessment component are described below.

Program Implementation Action Steps

- **Develop Logic Models for Overall Program, Components**
  - — Guided by theory of change, write succeeding descriptive phrases to identify (in developmental sequence if applicable):
    - • Each component (addressing an underlying risk or protective factor) that will bring about the change needed (objective)*
    - • Your goal (final outcome and impact)**

- **Develop Action Plans for Documentation**
  - — Restate objectives, goals in measurable terms using your needs assessment data (baseline)
  - — Indicate "who" will measure "what," "when," and "how" as you track:
    - • the implementation of your program or initiative
    - • difference between expected and actual immediate and intermediate outcomes
  - — Specify procedures, adaptations, and person(s) in charge of:
    - • recruitment and maintenance, including participant attendance and attrition
    - • organizational capacity issues
    - • ongoing quality review
    - • documentation

- **Document, Review, Improve Quality**
  - — Document and improve for ongoing quality improvement:
    - • participants' demographics, methods of recruitment, actual attendance, attrition
    - • program issues: planned & unplanned adaptations; cultural problems/issues; indicators of unmet need(s)/ resource(s)development
    - • Implementation problems/issues relative to organizational capacity and community readiness
    - • Un- or under-realized outcomes: Differences between expected and actual outcomes

- **Revisit Fidelity and Adaptation Issues as Necessary**

* as measured by change between baseline measure of risk/protective factor and new measure after completion of component
** as measured by change between baseline measure of general substance abuse problem and new measure after completion of component

The Importance of Planning and Documentation

While implementation generally refers exclusively to program activities, the implementation process in *PATHWAYS* actually begins with planning. Planning is pivotal to a successful outcome and, if done carefully, will make evaluation tasks much easier. Planning helps increase the effectiveness of your effort by enabling you to focus energy, ensure that staff and other stakeholders are working toward the same goals, and assess and adjust programmatic direction, if needed. In short, planning is a structured effort to shape and guide your prevention efforts. With proper planning, you can avoid many of the problems that can undermine the success of your work.

PATHWAYS uses two simple tools, logic models and action plans, as the framework for this planning process. Here are the implementation tools preferred for *PATHWAYS*:

- *Logic Model*—A program logic model is a graphic depiction of the theory of change that provides the underlying rationale for a program. It includes the strategies and activities that specifically address the underlying needs and resources and specifies the expected immediate and *intermediate outcomes*, or objectives, and the expected long-term outcomes, or goals. A component logic model takes one of the program's core components and treats it as if it were a program itself. It outlines the theory of change within that single component.
- *Action Plan*—Translates the logic model into an operational plan or chart that shows the key tasks to be completed. A good action plan details "who" in your organization will be doing "what," "to whom," "for what purpose," "when," and "for how long." You will find it useful to develop action plans for the program logic model as well as for the component logic models.

Logic models focus on the conceptual structure and links between assumptions, activities, and outcomes. In essence, logic models graphically portray the program itself: the activities designed to change attitudes, skills, knowledge, and behaviors. They depict the pathway to long-term change. Action plans, on the other hand, are operational; they detail all the tasks that need to be completed so that the program can be delivered and outcomes can be measured, analyzed, and documented for ongoing control and improvement when necessary. In addition to documenting who, what, etc., they document immediate and intermediate outcomes. They call attention to the need for remedial action when immediate or intermediate outcomes

are not achieved. It is important to keep in mind throughout this process that positive outcomes can be achieved only if the substantive elements of the program are

1. Delivered by people who are capable and skilled with respect to formulating and delivering the substantive messages embodied in the program and are skilled with respect to networking, mobilizing, advocating, articulating, and pursuing change;

2. Received by the people for whom the substantive message is intended; and

3. Received by a sufficient number of people over a sufficient period of time to make a difference in baseline substance abuse measures.

Together, logic models and action plans are helpful in producing process evaluations, because they document the unfolding of planned, unplanned, and alternative activities that have contributed to outcomes. Action plans, in particular, provide the outline for a process evaluation. They are a useful tool for managers in tracking outcomes and implementation issues. Action plans are also useful for facilitating timely communication between implementators and stakeholders about both successes and areas of concern.

Logic models and action plans sound complicated, but they are really user-friendly, effective tools once you gain some experience using them. Figure 4.1 shows a program logic model for a SAMHSA model program; Figure 4.2 shows a component logic model for the same program. Later in this chapter we will look at how logic models might be developed for different types of coalitions.

Documentation goes hand in hand with planning in the *PATHWAYS* process. Documentation is critical to systematic implementation, ongoing evaluation, and adaptation. The documentation that you undertake while implementing your program (using your action plans) is also essential to your evaluation report. Chapter 4 works in concert with chapter 5. Additional discussion of some of the important concepts in your documentation process (e.g., *process measures*, immediate and intermediate outcomes, etc.) occurs in chapter 5. You should read chapter 5 and refer to it as necessary as you create and implement your logic models and action plans.

Since documentation is really a component of evaluation as well as implementation, be sure to involve your evaluation team as early in the process as possible. Evaluation works best as a team effort. One person heads the team and has primary responsibility for the project with assistance from other staff and volunteers. (You, the practitioner, need not be the team leader.) Together, your evaluation team does the following:

- Determines the design and measurement issues related to the evaluation;
- Develops the evaluation plan, outcome measures, and data collection instruments;
- Collects, analyzes, and interprets data; and
- Prepares the report on evaluation findings.

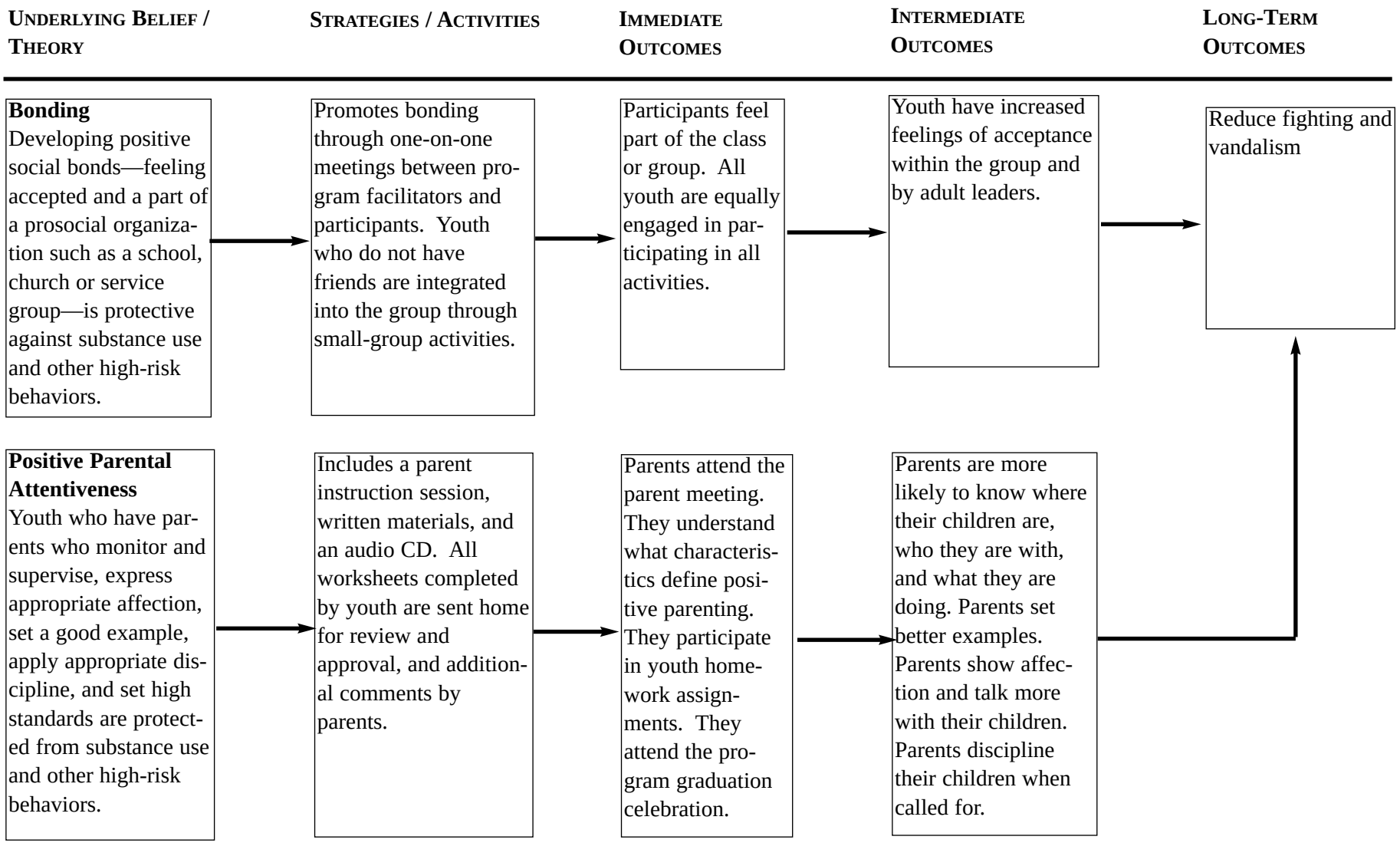
If you have developed this plan on your own, without the resources of a professional evaluator, your work will be considerably enhanced by a review and critical discussion with an experienced evaluator.

Implementation success requires that:

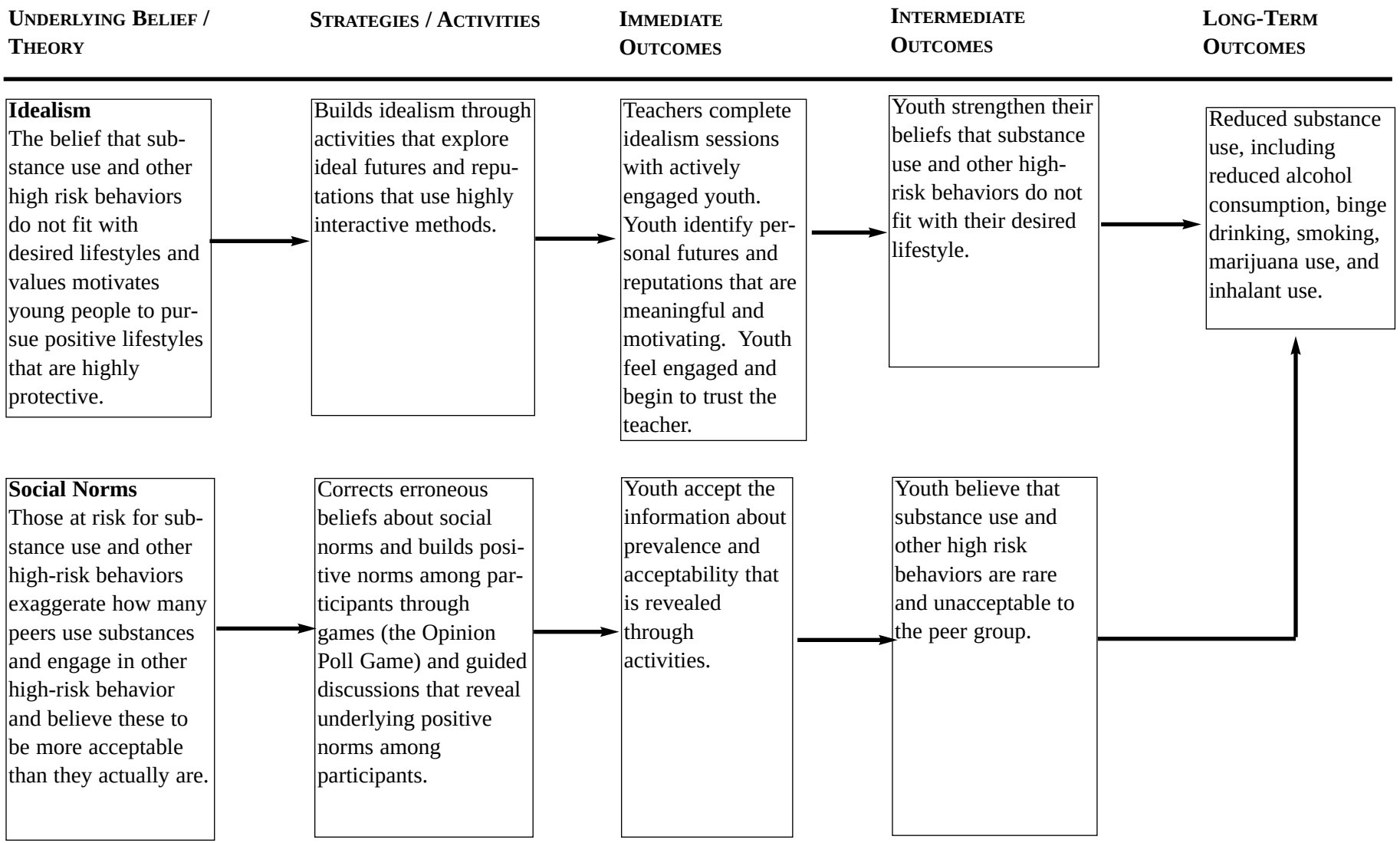
- The program be delivered by skilled facilitators
- The program be received by the proper audience
- The program be delivered to a sufficient number of people over a sufficient period of time
- The program be delivered as intended/ designed (dosage)

Figure 4.1 Sample Logic Model

Sample Logic Model (Part I)



Sample Logic Model (Part II)



Developing Logic Models

A program logic model is a graphic depiction of the theory of, or pathway to, change that provides the underlying rationale for a program. It includes the strategies and activities that specifically address underlying needs and resources and specifies the expected immediate and intermediate outcomes, or objectives, and the expected long-term outcomes, or goals. Notice how the Logic Model example (Fig. 4.1) uses the key program components to illustrate how the specific risk and protective factors are expected to change (objectives) so that the long-term outcome (goal) can be realized.

Consider these questions as you formulate your program logic model:

- What are the components of the selected program that address each of the underlying risk and protective factors you have listed for your population or area of interest?
- Is there a developmental sequence to these components, and, if so, what is the proper sequence?
- What are the changes you expect to see in each of the underlying risk factors (your objectives) that you have identified?
- What is the long-term outcome (your goal) that the program will achieve?

Guided by the theory of change for your program, write successive statements to identify each component that addresses an underlying risk or protective factors that will help bring about the changes needed (the objectives) to achieve your goal (long-term outcomes): the final box or circle (or whatever graphic element you are using) of your logic model.

If you are implementing a single program, and you have selected a SAMHSA model or effective program, it is likely that the program developer has already created a logic model for you to consider. However, that logic model was not created using your defined population's unique risk and protective factors. You may still have to develop your own logic model to address not only those unique factors, but also any adaptations you will be making to the program.

Even if you are not making adaptations, you will want to develop your own program logic model following the guidelines in this chapter. These guidelines are likely to be more detailed than the process followed by the developer. More importantly, the process of putting your concepts into a tangible form helps ensure that you and others have consensus.

The graphic format you choose to depict your logic model may look quite different from the boxes and arrows used in this publication's examples of logic models. Any graphic format is fine, so long as it is clear, comprehensible, and usable by all.

At its most basic level, a component logic model takes one of the program's core components and treats it as if it were a program itself. It outlines the theory of change within that single component. In other words, while the program logic model identifies the key components of the program, the component logic models identify the theory of change within each of the components.

You develop a component logic model using the same process described for the program logic model. Each of the activities that makes up the components of your program can be specified (See Figure 4.2, which shows a component logic model for *one* of the components that make up the All-Stars Program Logic Model). The component logic model is your map for this process. The component action plan provides the documentation.

Also review the discussion of immediate, intermediate, and long-term outcomes in chapter 5. These are the outcomes that you expect after completion of each program component that are critical to achievement of your goals.

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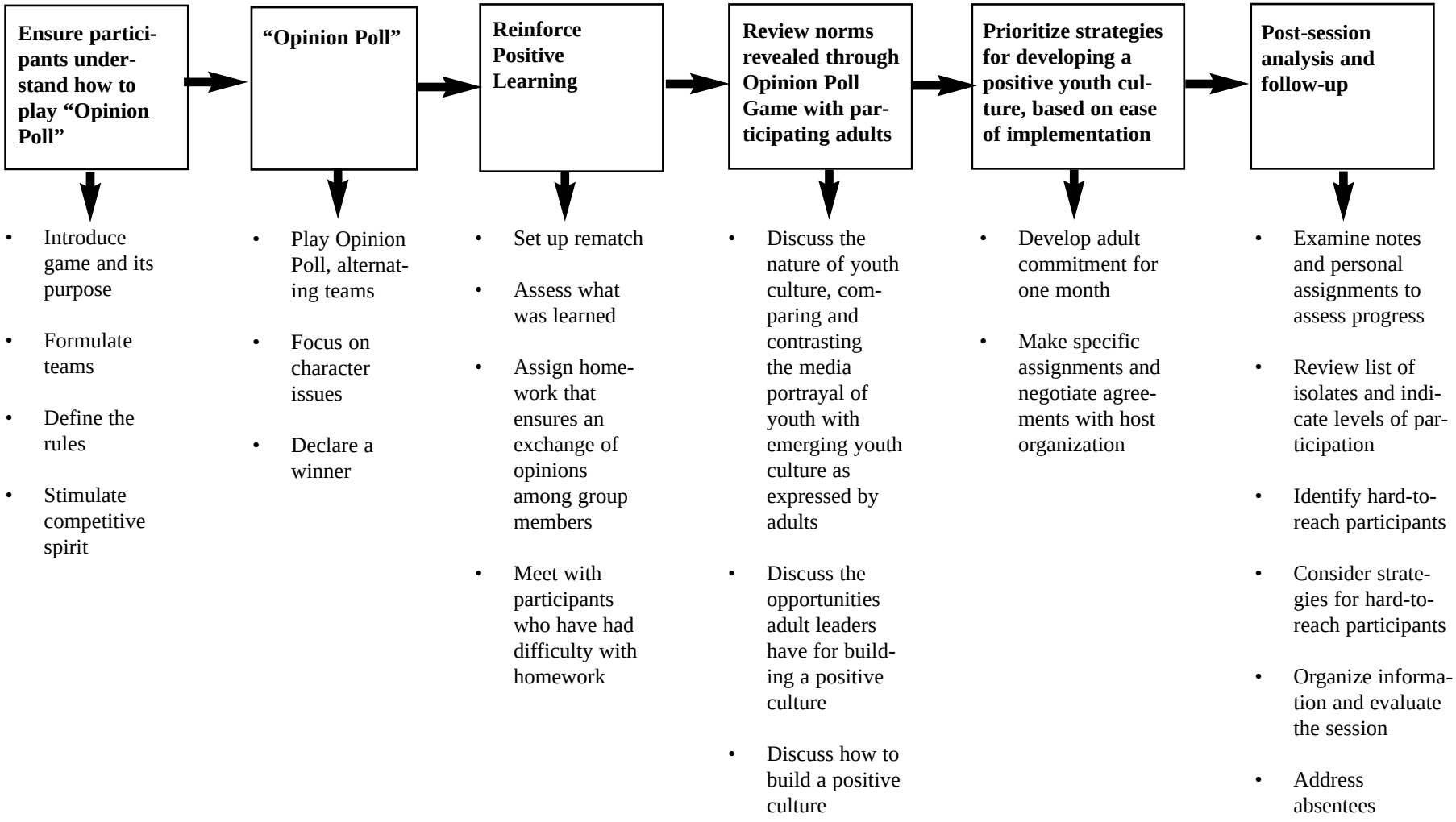
Logic Model Design

The graphic format you choose to depict your logic model may look quite different from the boxes and arrows used in this publication's examples of logic models.

Any graphic format is fine, so long as it is clear, comprehensible, and usable by all.

Figure 4-2: Component Logic Model: Building a Positive Norm About High-Risk Behaviors



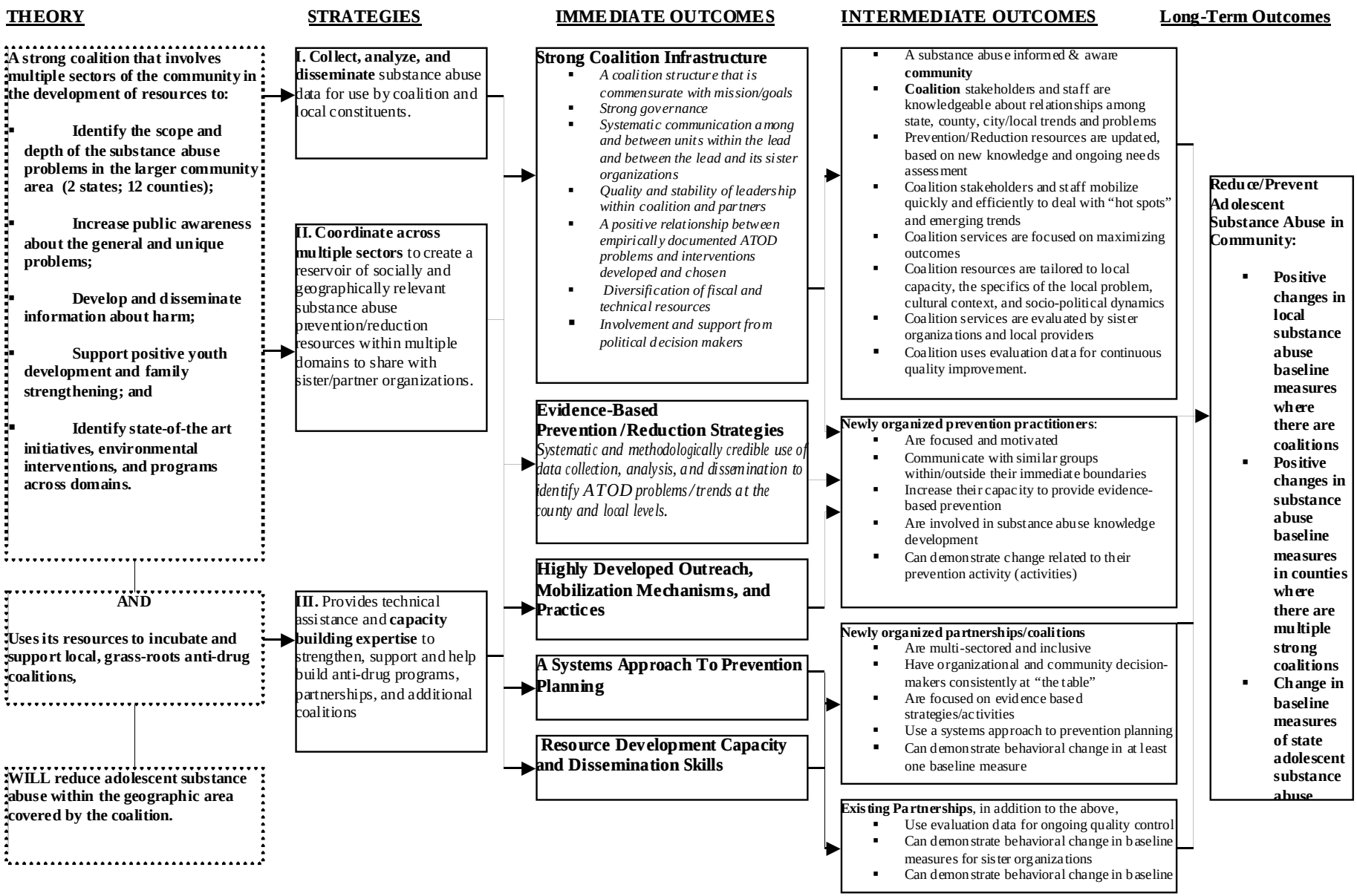
Logic Models for Coalitions and Programs Involving Multiple Agencies or Providers

Developing a logic model for a coalition or for programs involving multiple agencies or providers is somewhat different from a single program logic model. Coalition logic models and those for programs involving multiple agencies or providers account for the fact that their organizational structure (programs involving multiple agencies or providers usually have a lead agency) serves a programmatic and/or service delivery function. In fact, coalitions are referred to by some as "environmental" programs or initiatives. Thus, logic models in these cases need to address the breadth and depth of group activities. Often, component logic models are developed by the coalition partner or agency member. For example, if a community recreation center is delivering a particular program as one component of a county-wide coalition, the center's staff, rather than the coalition, might develop its logic model (or use one available through the program developer) and action plans. However, that program—as well as those delivered by other members of the coalition—would be reflected in the coalition's overall logic model.

As coalitions are not all organized alike, there can be no single coalition logic model template. Figure 4.3 shows a somewhat elaborate logic model that might be used by an umbrella coalition that serves as the organizing entity for a host of secondary coalitions and partnerships over a broad geographic area. The primary strategies of such a coalition, as the logic model shows, are to galvanize and share resources, engage in data collection and analysis for a broad area, share that data with local communities within the broader area, and assist those communities in developing their own partnerships and programs based on local need. These partnerships then become members of the greater collaborative.

Remember this is only one of several coalition structures, and each of the partner coalitions would each have its own logic model.

Figure 4.3: Umbrella Coalition Logic Model



Developing Action Plans

The action plan translates the program and component logic models into a practical operational plan. You can also think of it as a detailed "to-do" list. The action plan organizes your general implementation effort, guiding you and your staff as you strive to implement each component to its maximum potential. Action plans also assign responsibility for program activities; provide opportunities and space to record outcomes; and identify, track, and measure the results of adaptations when they occur.

Like logic models, action plans come in many forms and vary in their complexity. The format is not important as long as it can be clearly followed by others. While the level of detail will vary, the action plan for the program logic model is relatively brief (Figure 4.5 is a sample action plan to accompany a SAMHSA program logic model). Note that the term "implementation plan" is often used interchangeably with the term "action plan." Later, you will develop a separate action plan for each component in order to record more details.

Action plans are useful tools, especially for program directors. They have innumerable uses in organizing the effort, budgeting, managing the process, coordinating communications, documenting progress, and evaluating results. Here are some items to cover in your action plans:

- The successive tasks that should be completed by staff or partners before the program or component can begin;
- The delegation of authority and responsibility for task completion;
- Timelines associated with each task, including planned start, actual start, planned end, actual end;
- How and why adaptations are needed and to what effect;
- Who will be responsible for measuring, analyzing, and communicating with staff (and others as needed) differences between expected and actual change; and
- Who will be responsible for maintaining general documentation of the process overall.

Begin your general program action plan (implementation plan) by restating your goal in measurable terms, using needs assessment data (e.g., to prevent and/or to reduce _____ and/or _____ by _____). Then decide and indicate who will handle the measurement, and when and how measures will be taken. Finally, you need to specify the plans, procedures, and person(s) in charge for ongoing quality review (as detailed later in this chapter), organizational capacity issues (see chapter 2), and full documentation as implementation progresses.

You may wish to add detail to this program action plan, such as participant data (e.g., how many participants are expected to attend what/for how long). However, as noted above, you can save the detail for the component action plans. Either way, remember to keep the action plan current by documenting changes in assignments, timelines, and other significant operational matters.

The more thoughtfully you develop and track activities, issues, and outcomes on your action plans, the easier it will be for you to pinpoint any problems, take corrective action, and produce the results you expect. In short, comprehensive action plans will minimize your evaluation tasks.

Component action plans keep track of the who, what, where, when, how, and for how long for each of the activities within the program components. Unlike the overall program action plan, however, the component action plans will be quite detailed, sometimes extending for many pages. Again, this is a chart of everything that needs to be done as part of your program. For instance, as we have shown on pages 110-111, the program logic model for the All Stars Program includes four components. Each of these components requires its own separate action plan to chart all the work that needs to be accomplished and who will be responsible.

Begin each component action plan by restating the change you expect after completion of that component (e.g., “to increase academic core competencies for 12 of the 15 participants by at least one grade level within six months”). You may remember that the change you expect after completing a component is also called an objective. Identify the activities that will enable you to meet each objective. Document on your action plan who will be responsible for each component and/or activity. Develop a very specific timeline. Keep track of participant attendance for each activity and make sure to note any unusual occurrence, positive or negative. Such information will be very helpful as you evaluate to address questions about outcomes. Remember to indicate the immediate, intermediate, and long-term outcomes that you expect, how they will be measured, and by whom.

After completion of the activities for each component, you will record the actual amount of change. This will be the change between the baseline measure and your subsequent measures of the underlying condition the component was designed to address. This is actually part of the evaluation process and may be one of your evaluator's tasks, depending on how your evaluation team is organized.

Should actual outcomes fall short of your expectations, examine your component action plans. Look for problems encountered during implementation. Review planned (or unplanned) adaptations. Consider cultural issues. A team meeting that includes the staff member responsible for the component in question may yield insight about why expectations were not met.

A problem of unmet expectations may stem not from the implementation process itself but from the initial needs and resources assessment, which may have failed to dig deep enough into the needs of your defined population. A detailed, thoroughly documented action plans allows you not only see where you are going but where you have been. You can retrace your steps to explain why a component did or did not work as expected.

In the following example, the father was not ready for the family strengthening component being presented. Deeper analysis of his needs and resources clarified a need for training in basic parenting skills as a prerequisite for more advanced family strengthening concepts.

Example: "Dealing with Unmet Outcome Expectations"

A facilitator in a family strengthening project reported to the project director that one of the youngsters had reported that his father had "thrown my brother out of the car." Fearing child abuse, the project director notified the facilitator for the parent group, only to learn that the father had, indeed, thrown the child out of the car—but not in such literal terms. The father, faced with a temper tantrum on the part of the seven-year-old, ordered the child out of the car and revoked his privilege to attend the event to which the family was headed. Clearly the father had assimilated some of the principles presented in the parenting class. But by leaving a seven-year-old unsupervised in the yard when the family left, the father put the program director and facilitators on notice that more basic parenting skills needed to be learned before the strategies of the family strengthening program could be successfully implemented. Additional assessment for the group in which the father was a participant revealed that many in the group could benefit from a precursor to the program that had been selected.

Action Plan Details

- Restate goal in measurable terms using baseline data
- Identify and sequence activities according to whether they lead to immediate or intermediate outcomes.
- Indicate when and how immediate and intermediate outcomes will be measured and by whom.
- Specify any planned adaptations.
- Repeat additional sets of activities.
- Establish process for ongoing review.

Fig. 4.4: Program Manager Action Plan

	Activity	Facilitator and Assistant	Date of Implementation
Underlying Issue Youth who believe high-risk behaviors to be unpopular among their peers are protected from participating in them. **Lesson Objective** Participants will understand that high-risk behaviors (substance use, bullying, premature sexual activity) are unacceptable. Standing up for commitments, remaining drug-free, and giving others respect are qualities to be emulated.	Opinion Poll Game	Class 7A Claire Soast/ Brenda Schooler	
		Class 7B John Matthews/ Linda Ohashi	
		Class 8A Tom Vitullo/ Norma Austin	
		Class 8B Jean Hamilton/ Verna Sanchez	

Fig. 4-4: Program Manager's Action Plan, continued

Class	**Attendance Youth/Adult**	**Observations Attached**	**Materials & prep reviewed**	**Intermediate Outcomes** Change in normative beliefs measured by the *Interactions with Antisocial Peers Scale* from *Student Survey of Risk and Protective Factors* (1998)	**Final Outcomes** 3 months post-program completion
7A	___Youths ___ Adults	___ Yes ___ No	___ Yes ___ No	_____ % Tested _____ Date _____ % Change p= Significance	_____ % Tested _____ Date _____ % Change p= Significance
7B	___Youths ___ Adults	___ Yes ___ No	___ Yes ___ No	_____ % Tested _____ Date _____ % Change p= Significance	_____ % Tested _____ Date _____ % Change p= Significance
8A	___Youths ___ Adults	___ Yes ___ No	___ Yes ___ No	_____ % Tested _____ Date _____ % Change p= Significance	_____ % Tested _____ Date _____ % Change p= Significance
8B	___Youths ___ Adults	___ Yes ___ No	___ Yes ___ No	_____ % Tested _____ Date _____ % Change p= Significance	_____ % Tested _____ Date _____ % Change p= Significance

Fig. 4.5: Teacher's Action Plan

Preparation	**Comments/Observations/ Outcomes**	**Session Review** (5 minutes)	**Comments/Observations/ Outcomes**
__ Gather necessary materials. ❑ Program Banner ❑ Standards for Getting Along poster ❑ Small prizes (optional) ❑ Marker board or easel ❑ Marking pens ❑ Opinion Poll Survey results __ Arrange room with space for competition and answer/score recording. __ Invite a group participant to act as an assistant who will keep score. __ Prepare assistant (Brenda Schooler) for tasks. __ Decide questions in Opinion Poll Survey to include and exclude.	Attendance: _____ Absent: Follow-up on absentees: Student assistant: Other comments:	__ Display Standards for Getting Along for all participants to see. __ Remind participants of their commitment to the Standards. __ Prepare assistant to meet immediately following the session. __ Welcome guests by asking them to introduce themselves to the group. __ Review last session: ❑ Ask participants what they remember from last session. ❑ Ask participants "What is the Law of the Harvest?" __ Perform pre-test using the *Interactions with Antisocial Peers Scale* from *Student Survey of Risk and Protective Factors* (1998). __ Discuss Homework ❑ Have participants organize into homework teams (if they were created). ❑ Remind participants of the homework assignment. ❑ Have participants report about their parents' reaction to their homework assignment. ❑ Have participants present their parents' answers. ❑ Have participants summarize what they learned from the homework.	

Fig. 4.5: Teacher's Action Plan, continued

Set up the Opinion Poll Game (5 minutes)	**Comments/Observations/Outcomes**
__ Introduce The Opinion Poll Game to the group. Explain that it will test their understanding of what other people in their group think. __ Form teams and seat team members together __ Define the rules of play • Teams will alternate turns • The team that is up will try to guess answers others gave to the opinion poll survey • Team members will take turns guessing the answers to the questions • If a guess is correct, the team will get the number of points equal to the number of people in the group who gave that answer. • If they guess wrong, the team will get a strike • If the team guesses all the answers, they keep their points • If the team gets three strikes, the opposing team will have one chance to steal all the points by guessing a missing answer • Only one person on a team can speak at a time. If anyone else speaks they will automatically get a strike. If someone on the opposing team talks out of turn, they will start with a strike when it is their turn. • You will be the final judge on all questions. __ Create competition • Have teams select a captain and a name • Encourage spirit of competition	

Fig. 4-5: Teacher's Action Plan, continued

The Game is Afoot (45 minutes)	**Comments/Observations/ Outcomes**	**Conclusion and Homework (5 minutes)**	**Comments/Observations/ Outcomes**
__ Play the game, alternating teams. __ Keep track of questions used. __ Focus on character issues. ❑ Discuss questions that deal with high-risk behaviors and character issues. ❑ Ask students what each answer tells them about the people in their group. ❑ Ask probing questions and encourage discussion. ❑ Encourage reflection on answers. __ Declare a winner. ❑ Play until all questions are answered or time has run out. ❑ Make sure each team has an equal number of times up. ❑ Provide a treat or prize if one is available.		__ Set up a rematch. ❑ Point out unused questions. ❑ Ask losing team if they would like a rematch. ❑ Tell when the rematch will happen. __ Ask participants and assistants: ❑ "What did you learn today?" ❑ "What do the answers that were given tell about how this group thinks about risky behaviors?" ❑ "What do the answers tell you about how to get respect from others?" __ Give homework assignment. __ You may distribute copies of the Opinion Poll Results Tally Sheets or post answers. __ Thank guests for attending. __ Invite guests to share thoughts or impressions. __ Meet with and help individuals who had difficulty completing the home work. ❑ Have participants summarize what they learned from the home-work.	**Who won?** **Rematch date:** **Sample guest thoughts/ impressions:** **Who needed help?**

Fig. 4.5: Teacher's Action Plan, continued

Strategies for Success – Positive Cultures (10 minutes)	**Comments/Observations/ Outcomes**	**Post-Session Analysis and Follow-Up (30 minutes)**	**Comments/Observations/ Outcomes**
__ Review today's session with adult leaders: ❑ Have adults guess participants' answers. ❑ Share answers to pertinent questions. __ Discuss youth culture. ❑ Contrast rival portrayals. __ Discuss the opportunity leaders have for building a positive culture. __ Discuss how to build a positive culture: ❑ Ask about participants' own positive childhood influences. ❑ Encourage creativity. ❑ Identify ideas which can be implemented immediately. ❑ Make specific assignments to individuals and organizations about what they can do in the next month ❑ Come to specific agreements about what the host organization can do ❑ Answer questions and address concerns	Assignments to participants: Assignments to host organization:	__ Review plans. ❑ Was observable progress made today? __ Consider isolates. ❑ Review list of isolates ❑ Did each actively participate in discussion or activities? __ Consider assistants. ❑ Review list of assistants. ❑ How supportive was each assistant in helping achieve session objectives? ❑ What comments did the assistant contribute to group discussion? ❑ How did the assistant contribute during the small group activity? ❑ How well did the assistant internalize the standards discussed in the group? __ Identify hard-to-reach participants. ❑ Identify participants who did not respond well ❑ Consider strategies to approach these participants in the future	**Today's progress:** **Isolates and their participation:** **Assistants and their helpfulness:** **Hard-to-reach participants:** **Strategies for reaching hard-to-reach participants:**

Maintaining Continuous Quality Control

Think of your logic models and the action plan for each component as living documents, to be reviewed regularly and modified when necessary. Your implementation team should routinely review the plans to see if you are on target or if mid-course adjustments are needed. The process that is popular in business circles, known as *Continuous Quality Improvement* (CQI), may help. Continuous Quality Improvement is the systematic assessment and feedback of evaluation information about planning, implementation, and outcomes (Senge, 1994) and the use of that information to improve programs.

Regular review of your program and component logic models and, especially, your action plans should be systemized within your organization. This is a crucial step in the success of your implementation, as well as your evaluation. Routine review enables you to do the following:

- Document program components that work well;
- Identify where improvements need to be made;
- Provide feedback to staff or others who can implement the strategies more effectively;
- Make timely adjustments in activities and programming to better address the desired outcomes;
- Provide information for keeping others informed (including the media), if applicable; and
- Determine if enough resources have been leveraged. Where might you find more?

Here are some of the specific areas to document as part of your action plan as you monitor implementation:

- Participant information
  - —Demographics
  - —Methods of recruitment
  - —Actual attendance
  - —Attrition

- Program issues
  - —Planned and unplanned adaptations

—Cultural problems/issues
—Indicators of unmet needs/resources development

- Implementation problems/issues
  —Organizational capacity
  —Community readiness

- Un- or under-realized outcomes
  —The differences between expected and actual change (outcomes) as measured by the change between baseline and new measures at the completion of a component

Routine review of your action plans can prevent you from proceeding with a program that is not working. It provides feedback on day-to-day operations, which enables you to make timely adjustments in programming and activities to ensure a more direct path to the outcomes you seek.

Reviewing your action plans has another benefit. It involves the stakeholders in the decisionmaking process for improving the program. They receive feedback on the impact of what they are doing and can use this feedback to guide decisions. For instance, if feedback shows that participants in a training session are not grasping the concepts being taught, you may decide to alter or intensify the teaching methods. Or, it may be that the teaching methods are not inadequate, but rather that the participants lack the "readiness" to grasp the concepts. With continuous review of your component logic models and action plans, you can identify obstacles to success early, while there is still time to make adjustments.

Revisiting Fidelity and Adaptation Issues *During* Implementation

Evidence-based programs need to be followed as rigorously as possible. Real life tells us, however, that adaptations may be needed, as discussed in chapter 3. The adaptation discussed in that chapter occurred prior to implementation. You may also find that adaptation is necessary after your program is underway. Here are two real-life examples:

Examples: "When Adaptation Might Be Needed"

A large organization with 30 years of experience in substance abuse prevention decided to implement an evidence-based program. After much research, it selected a program that had been successfully replicated many times and with many different defined populations. One of the major components of this program involved providing in-home therapeutic programs for all family members.

While all of the implementation steps were appropriately followed, the implementers began to notice that certain families were not achieving some of the intermediate outcomes. Further analysis uncovered that this happened with greater frequency among families of a particular culture, and that these families were often not home when the prevention specialist arrived to deliver the programs (even after confirming that the family members would be there). It was later learned that these families were uncomfortable when outsiders (even outsiders from their own culture) came into their home. Rather than address this issue directly, they expressed their discomfort by avoiding the in-home sessions.

Similarly, a community coalition, whose mission was to develop strong families within their community, decided to implement an evidence-based program with a group of families identified as needing a range of family programs. The coalition researched the options available and selected an evidence-based program that included multiple family components and programs.

This program had been successfully replicated in many locations with a broad range of defined populations. During implementation, however, the coalition's staff noticed that certain predicted intermediate outcomes associated with a particular parenting skills component of this evidence-based program were not occurring. After additional needs assessment, they discovered that this particular defined population had generational histories of extremely poor parenting practices, and that the practices being taught in the evidence-based program assumed a more advanced foundation of parenting skills.

Sometimes the need for adaptation does not become clear until the prevention initiative is well underway. Failure to achieve an immediate or intermediate outcome might be the first clue. Whenever outcomes are not being achieved as expected, you should ask yourself why.

Use your action plan for other clues to why expectations are not being met. Are the data from your needs and resources assessment consistent with the evidence-based program you are implementing? Is the cultural context appropriate? Is the defined population sufficiently similar? Are the suggested activities relevant to your defined population? Perhaps your defined population simply is not ready for the planned program and a remedial or interim program should be implemented first.

Given the complexities associated with determining whether adaptations are needed during implementation, or whether the program or its specific components were simply not implemented properly, you may want to seek assistance from a skilled evaluator. With the evaluator's help and/or your evaluation team, review the following steps prior to making a decision to adapt:

- Revisit the theory base behind the program to be sure that it is consistent with the findings from your needs and resources assessment.
- Analyze the *core components* of the evidence-based program in conjunction with your action plan for each component to determine which component(s) does not appear to be working.
- Check your needs assessment to single out those characteristics of your defined population that are truly unique and assess whether adaptation is needed to address those unique characteristics.
- Assess *fidelity* to ensure the core components were implemented as planned.

- Consult as needed with the program developer. Review the above steps and how they have shaped the plan for implementing the program in a particular setting. This may also include actual technical assistance from the developer, or referral to peers who have implemented the program in somewhat similar settings.
- Obtain feedback from the organization and/or community in which the implementation has taken place to help explain the outcomes you are getting.

Your analysis may take you back several steps to uncover the reasons for unsatisfactory results. That is why documentation is so important throughout this process of *PATHWAYS*. Thorough documentation of the steps you have taken will enable you to identify steps that will work and correct steps that do not work.

Make sure that you document even your failures and how you corrected them on your action plan. Adjust your component logic model if necessary. Neither the logic model nor the action plan is a report card. They are important tools that will help you plan and solve problems. You should not only record, but also report, what you accomplish. Encourage implementers to document what does not work as well as what does. This is valuable information that can contribute greatly to the field, as well as to your own overall success.

In Summary

Using logic models and action plans may seem tedious at first, but once accustomed to the process, you will see how they are indispensable. They will help keep your implementation on course toward positive outcomes. They will help you determine when adaptation is needed to meet your population's specific needs. They will facilitate the evaluation process and the reports needed to document your outcomes. If you are a coalition, or accountable for the outcomes of multiple providers, encourage each provider to follow this process. At the end, you can bundle each member's results to document the successful results achieved by the coalition.

The power of logic models and action plans lies in the process they generate. They provide a focus for practitioners and communities working collaboratively to find the best ways for achieving their goals and objectives.

These planning tools will also prove invaluable for building consensus. By facilitating analysis of why objectives have or have not been met, these tools help identify possible mid-course corrections and provide support when factors outside your control surface. When used to their best advantage, logic models and action plans serve as key building blocks for linking the community, program, budget, operations, and evaluation in a results-oriented process.

Reviewing the action steps for this chapter (page 105) will reinforce the importance of using these tools and documenting your implementation thoroughly. You will be glad for that documentation as you complete the process.

Resources and References

SAMHSA-related Web sites:

Centers for the Application of Prevention Technologies: www.captUS.org

SAMHSA model programs: www.modelprograms.samhsa.gov/

Center for Substance Abuse Prevention. (2002 Conference Edition). *Finding the balance: Program fidelity and adaptation in substance abuse prevention* [Online]. Available: www.preventiondss.org

Center for Substance Abuse Prevention. (1997). Guidelines and benchmarks for prevention programming (DHHS Publication No. 95-3033). Washington, DC: Department of Health and Human Services, Substance Abuse and Mental Health Services Administration.

Community Toolbox is a Web site (http://ctb.lsi.ukans.edu/) created and maintained by the University of Kansas Work Group on Health Promotion and Community Development in Lawrence, KS, and AHEC/Community Partners in Amherst, MA. Selected units:

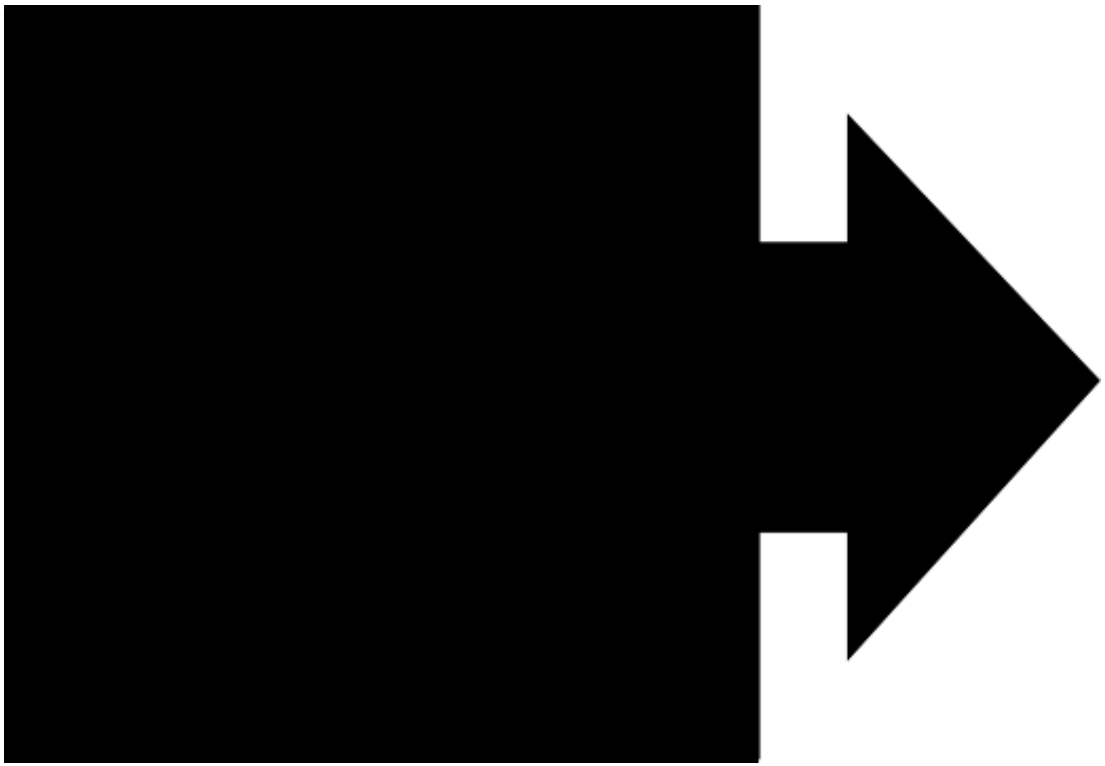
- Developing successful strategies: Planning to win, chapter 8, section 4
- Developing an action plan, part D, chapter 8, section 5
- Developing a plan for staff hiring and training, part D, chapter 10, section 1
- Hiring and training key staff of community organizations, part D, chapter 10, section 1

Northeast CAPT, presentation and training materials: www.northeastcapt.org/

Senge, Peter. (1994). *The fifth discipline: The art and practice of the learning organization.* New York: Doubleday.

Chapter 5

Complete an Evaluation



Introduction

Are we there yet?

The answer to that question can only be yes...and no. You have implemented your program, and documented the process on your action plans. You have measured and documented your immediate and intermediate outcomes and have used all this evaluation data for ongoing program feedback and improvement. In short, your evaluation has been a continuous process. Yet, you are not finished, because your evaluation of long-term outcomes is the linchpin in *PATHWAYS*.

Communities and funders want results. They want **outcomes**. You want to demonstrate that your program(s) works. You want to show that the changes taking place are meaningful and do justice to your efforts. If meaningful outcomes were elusive, you found out why. You have gone back to your needs and resources assessment, reviewed your underlying conditions, and/or examined readiness factors as they relate to your organization, defined population, or community. You have thought through the entire process quite systematically, using your logic models and action plans to remeasure the steps you have taken. You have used your evaluation team according to their strengths and skills. What have you missed? Are there competing factors that diminish your ability to succeed?

Appropriate, comprehensive outcome evaluation combines outcome data with an understanding of the process that leads to the achievement of those outcomes. This type of evaluation starts with the premise that every initiative is based on a theory or theories—some thought process about how and why it will work. The theory can be either explicit or implicit. The theory of how your program works helps you identify your expected immediate and intermediate outcomes (objectives), which, if successfully achieved, will lead toward measurable changes in the general substance abuse problem that was your initial concern—your goal. (See chapter 1 for more on developing your theory of change.)

The good news is that if you followed the process outlined in *PATHWAYS*, you have already documented some measurable outcomes. You have empirical evidence that what you are doing is accomplishing what

When Implemented, the PATHWAYS Process Will:

- Help you figure out what is working, what is not working, and why.
- Show behavioral change in factors or conditions associated with substance abuse or resistance to it.
- Result in substance abuse prevention and/or reduction.

you intended, and you are well prepared to conclude your program and complete the last module in this process successfully.

Carrying out a credible and useful evaluation is demanding. Local service providers and coalitions generally do not employ in-house evaluation staff. Spending scarce resources to purchase evaluation services is a difficult choice. However, to the extent that you use the outcomes-oriented approach recommended in this publication to engage in evaluation tasks, you will have minimized both your reliance on, and the cost of, outside evaluation.

Your ability to shepherd a well-executed evaluation is not only beneficial to your program, organization, or coalition, but also to the larger field of prevention practice. The prevention field needs to add to its database of promising approaches, innovations, and adaptations. This is done through the knowledge-based experiences of service providers and coalitions. Each provider of prevention services who engages in systematic evaluation contributes to the field as a whole.

PATHWAYS is an evaluation process from start to finish. Your completed logic models and accompanying action plans should be an excellent outline for your final evaluation report if you are an individual service provider or one of several service providers functioning as part of a coalition or other group effort. If you are a group effort, the logic models and action plans of each coalition partner or member of your group, when added to your own, provide you with the substantive material you need for a comprehensive evaluation. Of course, this entire evaluation process began with needs assessment (setting up baseline measures) and went into full gear during the program implementation phase when you began to document your immediate and intermediate outcomes. For those coalitions that come together to share progress and outcomes from consistently maintained data, sharing evaluation as well as final reports can contribute much to the ongoing discussions concerning promising innovations, fidelity, and adaptation, as well as being useful in making the case to funders and achieving sustainability.

Important Terms

Baseline Data: The initial information collected prior to the implementation of a program, against which outcomes can be compared at strategic points during, and at completion of, a program.

Immediate Outcome: The initial change in a sequence of changes (from baseline) expected to occur as a result of implementation of an evidence-based program.

Impact: The long-term change effected by the program(s) on the conditions described in baseline data.

Intermediate Outcomes: In a sequence of changes expected to occur in a program, the changes that are measured subsequent to immediate change, but prior to the long-term changes that are measured at program completion. Depending on the theory of, or pathway to, change guiding the program, an intermediate outcome in one program may be an immediate or long-term outcome in another.

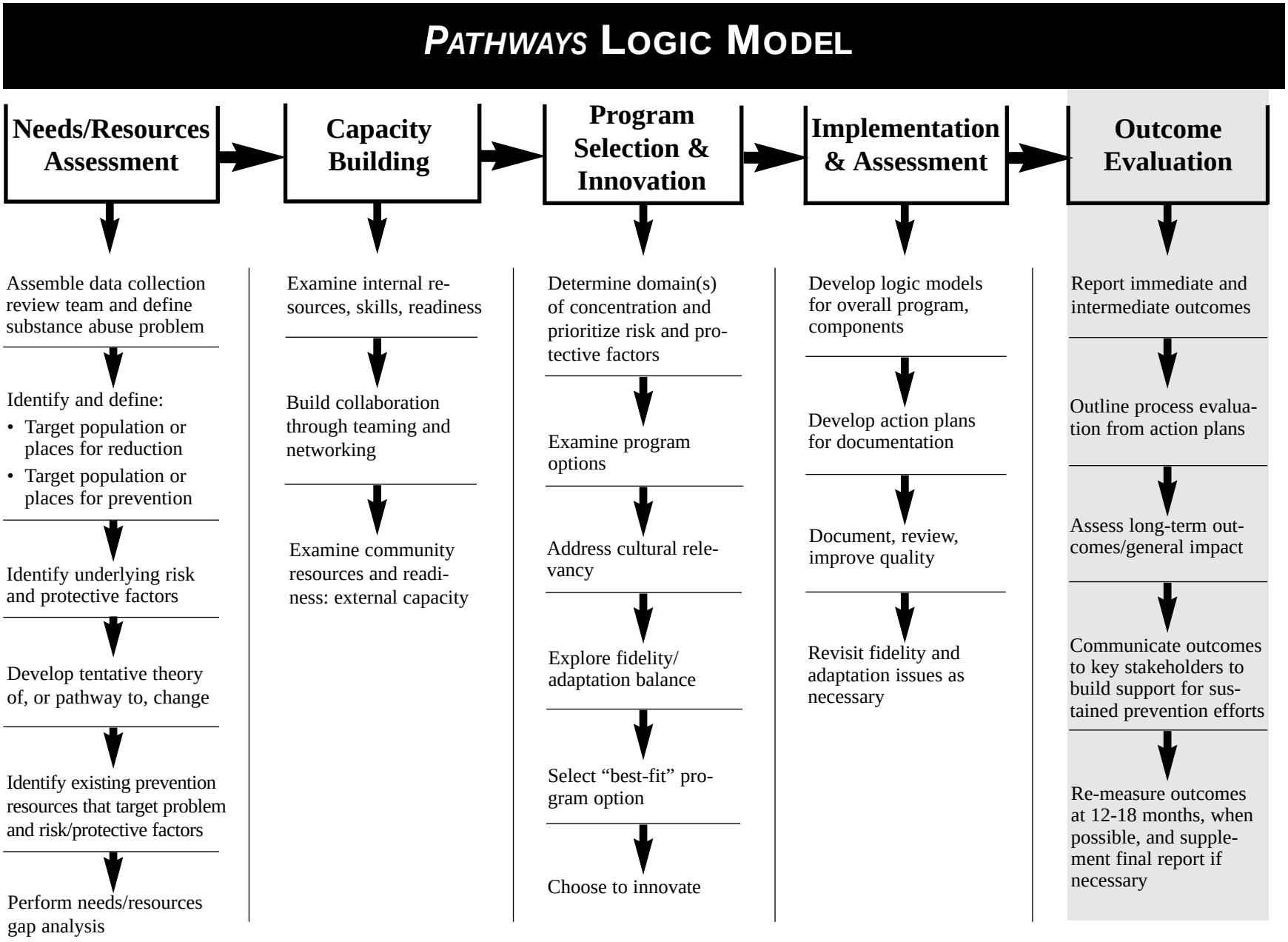
Long-term Outcomes: Over time, the change(s) that result from the program(s).

Outcomes: The extent of change in targeted attitudes, values, behaviors, or conditions between baseline measurement and subsequent points of measurement. Depending on the nature of the program and the theory of, or pathway to, change guiding it, changes can be immediate, intermediate, and long-term outcomes.

Process Measures: Measures of participation, "dosage," staffing, and other factors related to implementation. Process measures are *not* outcomes, because they describe events that are inputs to, or throughputs of, the delivery of a program.

Sustainability: The continuation of a program over a period of time, especially after grant monies disappear.

PATHWAYS Program Logic Model



Logic Model Discussion for Outcome Evaluation

The program logic model on the previous page shows how the outcome evaluation component (the shaded column) fits into the overall framework for *PATHWAYS*. The activities and tasks that make up the outcome evaluation component are described below.

Complete Outcome Evaluation Action Steps

- **Report Immediate and Intermediate Outcomes**
  - — Assemble immediate outcomes for final report
  - — Assemble intermediate outcomes for final report

- **Outline Process Evaluation From Action Plans**
  - — Assemble action plan data relative to process measures

- **Assess Long-Term Outcomes/General Impact**
  - — Document change(s) compared to baseline measures of general substance abuse problem
  - — Determine program sustainability and follow-up actions
  - — Produce final report and share findings

- **Communicate Outcomes to Key Stakeholders to Build Support for Sustained Prevention Efforts**

- **Re-Measure Outcomes at 12-18 Months, When Possible, and Supplement Final Report if Necessary**
  - — Re-measure outcomes at 12 and 18 months if possible
  - — Supplement your report to the community with these longer-term outcomes

Why Evaluate?

To Gain Insight

- Assess needs, desires, and resources of community members.
- Identify barriers to, and facilitators of, service use.
- Learn how to describe and measure program activities and effects.

To Affect Participants

- Reinforce program messages.
- Stimulate dialogue and raise awareness regarding health issues.
- Broaden consensus among coalition members regarding program goals.
- Teach evaluation skills to staff and other stakeholders.
- Support organizational change and development.

To Assess Effects

- Assess skills development by participants of the program.
- Compare changes in provider behavior over time.
- Compare costs with benefits.
- Find out which participants do well in the program.
- Decide where to allocate new resources.
- Document the level of success in accomplishing objectives.
- Demonstrate that accountability requirements are fulfilled.
- Aggregate information from several evaluations to estimate outcome effects for similar kinds of programs.
- Gather success stories.

To Change Practice

- Refine plans for introducing a new service.
- Characterize the extent to which program plans were implemented.
- Enhance the cultural competence of your program.
- Verify that participants' rights are protected.
- Set priorities for staff training.
- Make mid-course adjustments to improve client flow.
- Improve the clarity of communication messages.
- Determine if customer satisfaction rates can be improved.
- Mobilize community support for the program.

From Center for Disease Control. *Framework for program evaluation in public health*,1999.

Understanding the Levels of Outcomes

While each program is unique, outcomes can be accounted for at three distinct stages:

- *Immediate Outcomes:* The initial changes in a sequence of changes expected to occur in an evidence-based program.
- *Intermediate Outcomes:* In a sequence of changes expected to occur in an evidence-based program, the changes that are measured subsequent to immediate change, but prior to the changes that are measured at program completion. Depending on the theory of, or pathway to, change guiding the program, an intermediate outcome in one program may be an immediate or longer-term outcome in another.
- *Long-term Outcomes:* Over time, the change(s) that result from the program(s).

The long-term effects of the outcomes on the conditions described in baseline data are known as *impacts*.

Measuring Outcomes

Immediate and Intermediate Outcomes

Immediate and intermediate outcomes are the changes between baseline (measurement of your defined population's risk and protective factors before selecting and implementing a program), and the measurements taken of those same underlying factors at completion of each of the components. Using the same instruments you used to measure the baseline for the underlying conditions for your defined population or area of interest, re-measure upon completion of the component that addresses the condition. Your action plans, which you developed during the implementation phase (see chapter 4), detailed your *anticipated* immediate and intermediate outcomes and left room to record the actual outcomes as well. If the outcomes fell short of expectations, you

- Reviewed your action plan for faulty implementation;

- Considered the need to undertake a deeper needs assessment to enrich your understanding of participant readiness; and
- Consulted with the program developer or other experts regarding adaptation issues.

Process Evaluation

Process evaluation quantifies, as well as qualitatively describes, what you have done (the activity or program), to whom (how many in each group and how consistently), for how long (hours, weeks, months, years), and how smoothly. A process evaluation also describes how it was done and why it was done that way. Your component logic model maps—and your action plan tracks and documents—each aspect of the process, such as participant and implementer characteristics, attendance, implementation issues, etc.

The importance of process evaluation to the field is often underestimated. For example, program implementers report the number of youth in after-school programs, or families in parenting programs they served, without addressing one of the most important issues in program implementation and evaluation: participant attrition. Attendance history and the outreach methods used to attract and keep difficult-to-reach populations as active participants is a key issue in the prevention field.

Participation numbers alone may not show enough information. For instance, a "community night out," co-sponsored by a coalition, may attract hundreds of families. Beyond knowing that 400 people attended, would you not also want to know how the "community night out" fit into a broader coalition strategy and what type of follow-up activities might build upon that event?

This type of information adds to the knowledge base of program developers. It also helps you and other practitioners learn more about the programs you are considering. Think about how other practitioners may benefit from your experience, especially when your collaborators document a difficulty with the implementation of an evidence-based program and the subsequent resolution of that problem. Tracking the causes of failures, as well as successes, helps increase the knowledge base for substance abuse prevention overall.

Remember that your action plans are the vehicle for recording all pertinent process information. They should be as detailed as necessary. If you are managing a coalition, your evaluation will be greatly enhanced by the extent to which you receive process evaluations from each of your partners. As with immediate and intermediate outcomes, the process measures are recorded during the implementation phase.

Long-Term Program Outcomes

The baseline measures that you established for the general substance abuse problem in your needs and resources assessment are measured again after all program activities are completed to ascertain your long-term outcomes.

- If possible, the same measures that were made at the completion of the program are repeated 12 and 18 months later to demonstrate sustainable outcomes, or long-term outcomes.
- If you are part of a coalition or a community partnership, your long-term outcomes are changes in the general substance abuse problem that caused your concern. These are broader in scope than the outcomes of the individual collaborators. The prevention activities of your coalition partners are "components" of your coalition's overall logic model. Their long-term outcomes are your immediate or intermediate outcomes.
- The change that you have measured in your general substance abuse problem is documented on your logic model and/or action plan.
- Be sure to supplement your report to the community with these long-term impacts.

PATHWAYS is an evaluation process from start to finish. Your completed logic models and accompanying action plans should be an excellent outline for your evaluation report.

Getting Help from Expert Evaluators

The resources (time, money, expertise) you have available will influence the extent of your involvement in developing and executing an evaluation plan. Pre-planning for this step should come as you develop your implementation plan and assemble your evaluation team. Balancing your expectations (and those of others) with what is realistic and manageable can be difficult. You will need to consider the following:

- Time. Whose time and how much is available to work on evaluation? What priority will evaluation have in your overall workload? Involving community members is a way to spread the workload, but it may require additional time for preparation or training.
- Money. Some activities require financing. For example, what financial resources are available to print questionnaires, pay for postage, reimburse participants, and analyze the data?
- Expertise. What outside expertise will you need to assist with evaluation? Do you have the necessary expertise to construct instruments or analyze the data? Or, are there experienced people with knowledge of your program who can train you in the skills needed? Would the involvement of an independent evaluator increase the evaluation's credibility?

Prevention practitioners, and this includes coalitions, often have neither the inclination nor the time to produce a credible evaluation on their own. The assistance of an evaluator attuned to, and practiced in, the art and science of systematic outcome evaluation is essential. Sometimes the biggest challenge to getting useful evaluation results is finding an evaluator with whom you can work comfortably who understands your program.

How do you find expert evaluators?

- Check with universities, research institutes, or consulting firms.
- Ask other prevention groups/organizations for recommendations.
- Consult with representatives from your State agency who are responsible for administering the Federal substance abuse block grant funds.

- Call the Center for the Application of Prevention Technologies (CAPT) in your region for suggestions, or consult SAMHSA's CSAP project officer assigned to your State.
- Take an introductory course in the basic concepts relative to outcome evaluation (and earn CEUs) to make you a better consumer of evaluation services. (Evaluation courses are available at www.preventionpathways.samhsa.gov.)

Fortunately, if you have followed the process in *PATHWAYS*, you have reduced the time and effort that must be spent by an evaluator to produce a credible evaluation. The *PATHWAYS* process is data-driven and analysis oriented. Since you have been a partner in the process, you have already identified and minimized the tasks requiring expertise beyond your organization's capacity. And, you have been using the ongoing evaluation process to keep program staff and key stakeholders engaged in the program's success, so that unwelcome surprises are unlikely.

How Can You Be Sure of Your Conclusions?

If you selected an evidence-based program and implemented it well, chances are you will have positive outcomes based on your expectations. But even evidence-based programs are subject to variable results, as suggested in the three scenarios below:

Scenario A

You were able to select an evidence-based program that matched your needs, and you implemented it with nearly 100 percent fidelity. Under such conditions, since your theory, or theories, of change fit the changes intended by the program design, you may have been able to duplicate the program's outcomes almost perfectly.

Because of the congruence between your theory-based objectives and those of the program(s) you selected, you have no reason to believe that extenuating circumstances or happenstance caused the outcomes. The program developer took care of that during his/her extensive pilot testing. It is likely that your objectives (immediate and intermediate outcomes) have been met, and you have every expectation that your long-term outcomes—reduction in substance abuse for this population—will also occur.

Scenario B

You selected an evidence-based program but introduced several adaptations. Even though your adaptations were done carefully and thoughtfully, and were fully documented with strict adherence to your underlying factors and theories of change, you cannot be absolutely sure that the outcomes you obtained resulted from the program and not from extenuating circumstances.

To ensure that the outcomes secured were a direct result of the program (with its adaptations), a carefully matched comparison group, who received little or no services, was selected. At each point that you took measures of your target group, you took similar measures of your comparison group. Similar outcomes from both groups lead you to believe that the outcomes were not solely a result of the program but of other factors as well. If you see the significant outcomes you desire from your defined population, but do not see these outcomes in the comparison group, you can feel reasonably comfortable about attributing the outcomes to your program(s).

Scenario C

You selected an evidence-based program and have made several adaptations, but you do not have the capacity to set up a comparison or control group or cannot find one that has not already been exposed to significant substance abuse prevention programs.

Because of the complexity and time involved, this is the point where you might decide to seek outside assistance to ensure that the rigor you have exercised in your evaluation makes a compelling case that your program has achieved positive outcomes.

Even if you have followed the PATHWAYS process rigorously, you will not be able to make a causal claim for your selected program unless you are in the Scenario A category and have implemented an effective or model program. However, you may have sufficient documentation to demonstrate that your findings provide compelling evidence of program success.

Determining Sustainability

Sharing the findings from your evaluation with key stakeholders in your community may ultimately be the most important thing you can do to make the case for sustaining a successful program

What happens after the program has been implemented and the follow-up activities described above have occurred? Consider the program's *sustainability*. Sustainability means that a program is likely to continue over a period of time.

First, of course, you must determine if the program *should* be sustained. Changes in circumstances, staff, and community needs might suggest that this program is no longer a good fit for your defined population or broader community. Perhaps the desired outcomes were not achieved, and a re-evaluation of the needs and resources assessment suggests that program selection was faulty. Perhaps there have been changes in your population, place, or policy of interest that reduce the need for the program or that call for a different program altogether.

Chances are, however, because of the care with which you selected the program, and the ongoing evaluative process that enabled you to make adjustments to achieve desired outcomes, you will want to sustain a successful program. Continuing a successful program makes sense for several reasons:

- Ending a program that achieves positive results is counterproductive, if the problem for which it was chosen still exists.
- Creating a program requires significant start-up costs that can be amortized over future years if the program is continued.
- Implementing programs that are successful but not sustainable may jeopardize community support for future efforts.

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Communicating Outcomes

As you implement and evaluate the objectives in your programmatic effort, you will also need to create awareness of, and support for, your efforts by the broader community. A strategic communication plan is an invaluable tool for planning and communicating your needs and successes to the community and to community stakeholders at all levels. A strategic communication plan can help you

- Identify the key groups and members of your community who can assist in carrying out and sustaining your efforts to effect communitywide change;
- Divide these groups and individuals into audience segments that you can target with messages carefully tailored to their interests and concerns;
- Identify communication venues (letters, newsletters, newspaper, radio, TV, billboards, door hangers, etc.) that will cost-effectively reach each audience segment; and
- Establish expected measurable outcomes so you can ascertain if you are reaching your target audiences.

As you work to deliver your messages to various key audiences, be sure to craft interesting messages, especially those that put a human face on your successful outcomes, not just a summary of evaluation data. Yes, the data are important. The community does want to know the facts and figures of substance abuse reduction and prevention. However, prevention success stories that tell how your program affected specific participants can be a powerful tool for educating key stakeholders who can champion your efforts with funders and other community groups. These stories let everyone know that prevention works and is a vital community activity.

In Summary

Communities and funders want results. They want **outcomes.** And you want to demonstrate that your program works, that the changes taking place are meaningful and do justice to your efforts. The good news is that if you followed the steps outlined in *PATHWAYS*, you are likely to see measurable outcomes. You will have empirical evidence that what you are doing is accomplishing what you intended.

Look again at the steps for the evaluation component of this process. There are many potential benefits associated with employing the recommendations in this component. Evaluation will be an ongoing, dynamic, collaborative process. Evaluation expectations will be clear and appropriate. Information will steer future program development. Using a structure for collaborative evaluation, your coalition can expect to strengthen its programs and amass solid evidence of its effectiveness—for your future programming and for the field as a whole.

In addition, by following this process, you will be able to ensure that your program is accountable to those it is serving—the community at large and those who are providing funding. The process of evaluating your program in a continuous fashion not only allows you to document measurable outcomes, but also to make necessary adjustments, direct the future of your program, and make it sustainable.

SAMHSA Resources

SAMHSA-related Web sites:

Center for Substance Abuse Prevention/National Center for the Advancement of Prevention
http://preventionpathways.samhsa.gov/

Centers for the Application of Prevention Technologies: www.captUS.org

SAMHSA model programs Web site, evaluation information: www.modelprograms.samhsa.gov/

Evaluation technical assistance: http://preventionpathways.samhsa.gov/eval/default.htm

A number of useful technical assistance bulletins are available through the National Clearinghouse for Alcohol and Drug Information (NCADI), P.O. Box 2345, Rockville, MD 20847. A full list is available at http://store.health.org/. Of particular interest:

Evaluating prevention projects and programs

Cultural competence series

Guide to risk factor and outcome instruments for youth substance abuse prevention program evaluations

Measurements in prevention: A manual on selecting and using instruments to evaluate prevention programs

Resources and References

Annie E. Casey Foundation. (1995). *Getting smart, getting real: Using research and evaluation information to improve programs and policies* [Online report]. Available: www.aecf.org/publications/getsmart/aecget.htm

Bureau of Justice Assistance Evaluation Web site is designed to provide a variety of resources for evaluating criminal justice programs: www.bja.evaluationwebsite.org/

Centers for Disease Control and Prevention (CDC). (1999). *Framework for program evaluation in public health* [Online]. Available: www.cdc.gov/mmwr/preview/mmwrhtml/rr4811a1.htm

Community Toolbox, specifically: Our evaluation model: Evaluating comprehensive community initiatives: http://ctb.lsi.ukans.edu/tools/EN/section_1007.htm

InnoNet offers evaluation questions, indicators of success and strategies for collecting quantitative and qualitative data: www.innonet.org/

McNamara, C. *Basic guide to program evaluation* [Online as part of The Free Management Library]. Available at: www.mapnp.org/library/evaluatn/fnl_eval.htm

National Institute on Drug Abuse (NIDA) Research Monograph Series: www.nida.nih.gov/PubCat/PubsIndex.html, specifically:

Scientific methods for prevention and intervention research (#139).

Meta-analysis of drug abuse prevention programs (#170).

Office of Substance Abuse Prevention. (1992). Cultural competence for evaluators: A guide for alcohol and other drug abuse prevention practitioners working with ethnic/racial communities. In *Cultural Competence Series*. Washington, DC: U.S. Department of Health and Human Services.

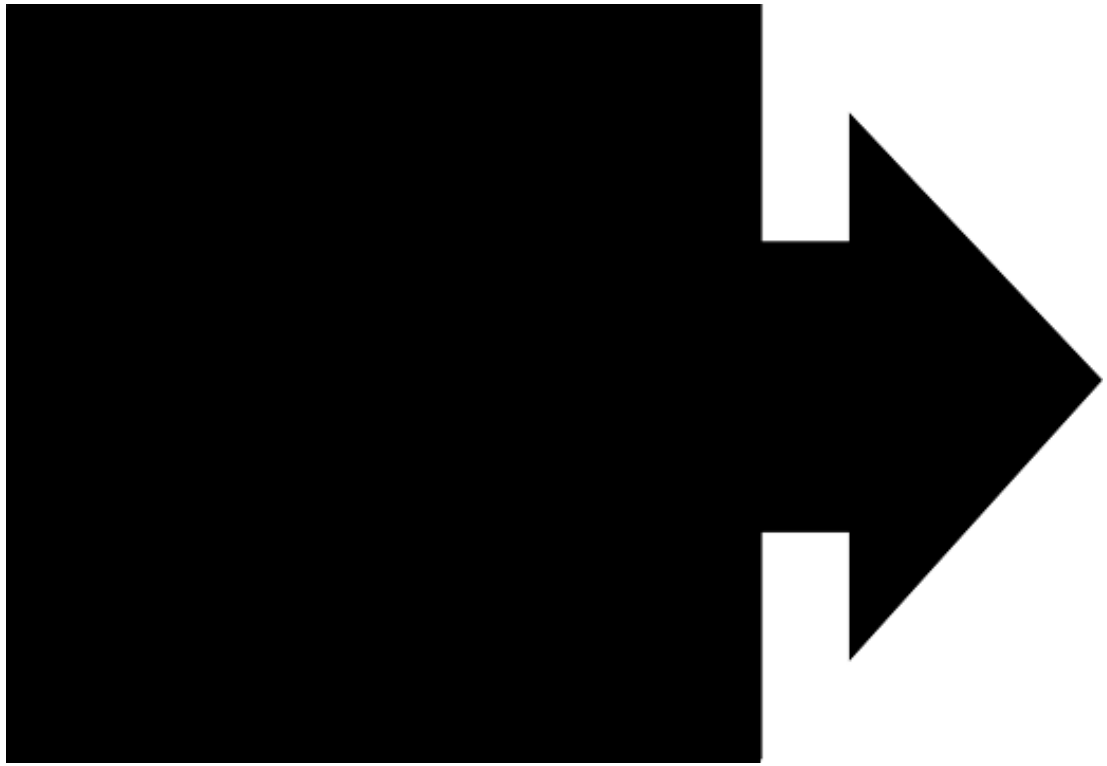
United Way, Outcome Measurement Resource Network: http://national.unitedway.org/outcomes/

Werthamer, L. & Chatterji, P. (1998). Preventive intervention cost-effectiveness and cost benefit: literature review [Online report]. Available: www.drugabuse.gov/HSR/da-pre/Werthamer Preventive.htm

Western Center for the Application of Prevention Technology: www.unr.edu/westcapt/

W. K. Kellogg Foundation, *Evaluation handbook* [Online]: Available: www.wkkf.org

Glossary of Important Terms



Glossary of Important Terms

OUTCOMES: The extent of change in targeted attitudes, values, behaviors, or conditions between baseline measurement and subsequent points of measurement. Depending on the nature of the program and the theory of, or pathway to, change guiding it, changes can be immediate, intermediate, and long-term outcomes.

PROGRAM: The sum total of organized, structured interventions, including environmental initiatives, designed to change social, physical, fiscal, or policy conditions within a definable geographic area or for a defined population.

Action Plan	Translates the theory of change represented by a logic model into an operational plan, detailing the key tasks that should be completed, including the measurement of outcomes. In this publication, the action plan details (a) how resources are used to get the planned work done; (b) whether or not the work was completed as planned; and (c) the result of the work (e.g., outreach brought in 40 participants) or the outcome at the completion of a component (e.g., 75 percent of the participants who completed at least 20 hours express significantly more negative feelings about recreational substance abuse than they expressed at baseline). See Implementation Plan.
Adaptation	Modification made to original plan for implementation and/or evaluation of a chosen program (e.g., qualitative and/or quantitative changes to components); changes in audience, setting, and/or intensity of program delivery, and in evaluating changes to research design, measures, or analysis. Research indicates that adaptations are more effective when (a) underlying program theory is understood; (b) core program components have been identified; and (c) both the community and the needs of the population of interest have been carefully defined. Research also indicates that success improves when adaptations are handled as additions to, rather than deletions of, program components.

Age of Onset	In substance abuse prevention, the age of first use.
Anecdotal Evidence	Information derived from a subjective report, observation, or example that may or may not be reliable, but cannot be considered scientifically valid or representative of a larger group or conditions in another location.
Archival Data	Relative to the collection of data for needs assessment purposes, information that is collected from existing records and maintained in some form. For example, most public agencies collect data that can be used directly or indirectly for an overall picture of substance use or abuse within the geographic area served by that agency (e.g., emergency room statistics, school surveys on substance abuse trends, crime reports). Once collected, the data can be cross-referenced in various combinations to identify individuals, groups, and geographic areas that are most appropriate for prevention or reduction purposes.
Baseline Data	The initial information collected prior to the implementation of a program, against which outcomes can be compared at strategic points during, and at completion of, a program.
Bicultural Stress	The difficulty or strain associated with living in a culture that is different from one's own.
Capacity	In this publication, the various types and levels of resources that an organization has at its disposal to meet implementation demands.
Coalition	A partnership of social, political, health, faith, education, law enforcement, and other relevant organizations, as well as community stakeholders, working together to advance substance abuse prevention and reduction within a community or geographic area. In a more generic sense, coalitions can refer to groups of people working together to accomplish a mutually acceptable goal.
Collaboration	The process by which people/organizations work together to accomplish a common mission.
Community Awareness	In this publication, a perception or recognition on the part of the community that there is a substance abuse problem. The level of this awareness can change over time.
Community Readiness	In this publication, not only the community's awareness of, interest in, and ability and willingness to support substance abuse prevention programs, but also the availability of skills and resources within the community and the ability of the prevention agency and/or coalition to access these resources.

Component Logic Model	See Logic Model
Conceptual Soundness	In this publication, refers to the linkage of underlying factors and theory to programs and outcomes in a logical way. The extent of conceptual soundness is based on existing theory or research underlying the model of change that supports the program.
Continuous Quality Improvement (CQI)	The systematic assessment and feedback of information about planning, implementation, and outcomes and use of this information to improve programs.
Core Components	Program elements that are demonstrably essential to achieving positive outcomes.
Credibility of Findings	Represents a continuum that is at its highest when the quality of implementation and evaluation are both high.
Core Measures	As used in SAMHSA terminology, a compendium of data collection instruments that measure underlying conditions—risks, resources, attitudes, and behaviors of different populations—related to the prevention and/or reduction of substance abuse.
Cultural Competence	The capacity of individuals to be sensitive to and to incorporate ethnic/cultural considerations into all aspects of their work relative to substance abuse prevention and reduction. Cultural competence is maximized by implementer/client involvement in all phases of the implementation process, as well as in the interpretation of outcomes.
Cultural Sensitivity	The ability to recognize and demonstrate an understanding of cultural differences.
Data Analysis	In this publication, the use of statistical and/or classification procedures that provide at least a preliminary understanding of the phenomena in question. In general terms, the assessment, interpretation, and/or appraisal of systematically collected information.
Data Driven	A process whereby decisions are informed by, and tested against, systematically gathered and analyzed information.

Domain	Sphere of activity or affiliation within which people live, work, and socialize (e.g., individual/peer, family, school, community).
Effect	A result, impact, or outcome.
Effective Program	In SAMHSA's terminology, a program that builds upon established theory or clear conceptual framework, comprises elements and activities grounded in that framework, demonstrates practical utility for the prevention field, has been well implemented and well evaluated, and has produced a consistent pattern of positive outcomes.
Environmental Analysis	An assessment of the formal and informal policies and the social, physical, or cultural conditions affecting an individual or a community.
Evaluation Instruments	Specially designed data collection tools (e.g., questionnaires, survey instruments, structured observation guides) to obtain measurably reliable responses from individuals or groups pertaining to their attitudes, abilities, beliefs, or behaviors.
Evidence-based Program	A program that is theory-driven, has activities related to the theory of change underlying the program model, has been well implemented, and has produced empirically verifiable outcomes, which are assumed to be positive.
Evolving Program	A program that is theory driven, has activities related to its underlying theory of change, and has an ongoing evaluation mechanism. While there may be anecdotal or even documented evidence of outcomes, the program has not been subject to a rigorous evaluation that includes at least one methodologically sound and reasonably well-implemented effectiveness trial.
Fidelity	On a continuum of high to low, where high represents the closest adherence to the developer's design, the degree of fit between the developer-defined components of a substance abuse prevention program and its actual implementation in a given organizational or community setting. In operational terms, the rigor with which a program adheres to the developer's model.

Fidelity/Adaptation Balance	A dynamic process that addresses both the need for fidelity to the original program model and the demonstrable need for local adaptation.
Focus Group	A representative group of people questioned together about their opinions, usually in a controlled setting. Focus groups are widely used as a method of gathering qualitative data. When created and implemented skillfully, they can bring an evaluator or evaluation team "inside" the issue of interest.
Generalizability	As used in this publication, the extent to which the positive or negative findings produced by specific programs under specified conditions can be duplicated in future efforts in different settings with different populations.
Goal	The clearly stated, specific, measurable outcome(s) or change(s) that can be reasonably expected at the conclusion of a methodically selected program.
Human Capacity/Resources	The collective knowledge, attitudes, motivation, and skills of the program implementers and other stakeholders.
Immediate Outcome	The initial change in a sequence of changes (from baseline) expected to occur as a result of program implementation.
Impact	The long-term changes effected by the program on the conditions described in baseline data.
Implementation Plan	As used in this publication, a planning tool for the program manager. Developing such a plan enables the program manager to gain control by identifying the functional and specialized requirements of the carefully chosen program; to pull together the team that must work together to produce a whole—without gaps, friction, or unnecessary duplication of effort—and to identify performance expectations for each of the program components. The plan need not be more detailed than that required by the program manager to establish initial direction and clarity of vision for the implementation group. See Action Plan.
Incidence	A measure of the number of people (often in an identified population) who have initiated a behavior—in this case, drug, alcohol, or tobacco use—during a specific period of time. The measure's special value is that it identifies the number of new users that can be compared to the number of new users historically, over comparable periods of time.

Indicator	A substitute measure for a concept that is not directly observable or measurable (e.g., prejudice, substance abuse). For example, an indicator of substance abuse could be "rate of emergency room admissions for drug overdose." Because of the imperfect fit between indicators and concepts, it is better to rely on several indicators rather than just one when measuring this type of concept.
Innovate	As used in this publication, to develop a new program according to a systematic approach that includes needs and resources assessment, capacity review and development, rigorous implementation, and thorough evaluation involving control groups.
Intermediate Outcomes	In a sequence of changes expected to occur in a program, the changes that are measured subsequent to immediate change, but prior to the long-term changes that are measured at program completion. Depending on the theory of change guiding the program, an intermediate outcome in one program may be an immediate or long-term outcome in another. See Outcomes.
Logic Model	A program logic model is a graphic depiction of the theory of change that provides the underlying rationale for a program. It includes the strategies and activities that specifically address the underlying needs and resources and specifies the expected immediate and intermediate outcomes, or objectives, and the expected long-term outcomes, or goals. A component logic model, also a graphic depiction, takes one of the program's core components and treats it as if it were a program itself. It outlines the theory of change within that single component.
Long-term Outcomes	Over time, the change(s) that result from the program.
Mobilization	As used in this publication, the process of bringing together and putting into action volunteers, community stakeholders, staff, and/or other resources in support of one or more prevention initiatives.
Model Program	In SAMHSA's terminology, model programs have all of the positive characteristics of effective programs with the added benefit that program developers have agreed to participate in SAMHSA-sponsored training, technical assistance, and dissemination efforts.
National Survey	Most often, a data collection effort conducted among a specially selected sample of people, who are, at the least, statistically representative of a larger population or group. National surveys are generally free from

	regional biases because they cover every region of the country and are typically sponsored by a Federal agency interested in determining national trends on a selected issue.
Objectives	As used in this publication, measurable statements of the expected change in risk and protective factors, or other underlying conditions, as expressed in the program's guiding theory of, or pathway to, change.
Objectivity	As used in this publication, refers to the expectation that data collection, analysis, and interpretation will adhere to standards of research that protect outcomes or results from the influence of personal preferences or loyalties.
Outcomes	The extent of change in targeted attitudes, values, behaviors, or conditions between baseline measurement and subsequent points of measurement. Depending on the nature of the program and the theory of, or pathway to, change guiding it, changes can be immediate, intermediate, and long-term outcomes. For example, changes in attitudes and values about substance abuse may be the final outcome of an informational program. However, changes in attitudes and values may be the immediate outcome of a parenting program that builds on those changes to bring about changes in communication patterns and other skills (intermediate outcomes). Changes in communication patterns would, in turn, strengthen middle school children's resistance to negative peer pressure (intermediate outcome), resulting in a delay in the onset of substance use (long-term outcome).
Pathway to Change	See Theory of Change.
Practical Significance	Meaningful and relevant information or results that have utility for the field. Some results may have statistical significance but little utility (e.g., statistically, left handed people use more drugs than right handed people). Evaluators often struggle with how to present findings and/or outcomes so they are relevant, meaningful, and useful to the practitioner and decisionmakers.
Precipitating Factors	Conditions or events that prompt or facilitate another condition or event.
Prevalence	As used in this publication, rates/numbers of people using or abusing substances during a specified period, usually one year.

Process Measures	Measures of participation, "dosage," staffing, and other factors related to implementation. Process measures are *not* outcomes, because they describe events that are inputs to, or throughputs of, the delivery of a program.
Program	As used throughout this publication, the term "program" refers to the sum total of organized, structured programs, including environmental initiatives, designed to change social, physical, fiscal, or policy conditions within a definable geographic area or for a defined population.
Promising Program	Promising programs are those that have been reasonably well evaluated, but the positive findings are not yet consistent enough, or the evaluation not yet rigorous enough, for the program to qualify as an effective program. SAMHSA's hope is that promising programs, through additional refinement and evaluation, will evolve into effective and model programs.
Protective Factors	Conditions that build bonding and can serve to buffer the negative effects of risks.
Proxy Measures	In this publication, data that can be used as an indicator—an indirect measure of substance use or abuse. In general, multiple indirect measures (proxies) are more reliable than a single proxy. An individual can also serve as a proxy. For example, a parent can serve as a proxy for his or her child; a community stakeholder can serve as the spokesperson/proxy for a group unwilling to talk with an interviewer.
Reliability	The consistency of a measurement, measurement instrument, form, or observation over time. The consistency of results (similar results over time) with similar populations, or under similar conditions, confirms the reliability of a measure. When desirable outcomes elude precise measurement, the reliability of descriptive information is key. The reliability of descriptive data (usually qualitative) is enhanced by the rigor and integrity of the techniques used for data gathering and analysis, the extent to which there are several different data sources for each of the phenomenon being described, the objectivity of the person or team reporting, and the logic and credibility of the theory behind the program.
Resources	Social, fiscal, recreational, and other community support that presently target substance abuse prevention and/or reduction.

Risk Factors	Conditions for a group, individual, or identified geographic area that increase the likelihood of a substance use/abuse problem.
School Survey	A process, most often using a specially designed instrument, to collect information relevant to school administration, student attitudes and behaviors, and/or student performance.
Science-Based Program	In SAMHSA's terminology, a program that has been ranked as "model" or "effective" in the NREP registry.
Social Indicator	A measure of a social issue that has been tracked over time (e.g., family and community income, educational attainment, health status, community recreation facilities, per pupil expenditures, etc.) and can be used as a proxy measure. Social indicators are often used to document levels of community and group risk and to serve as proxies for the existence of social problems, such as substance use/abuse.
Stakeholders	As used in this publication, all members of the community who have a vested interest (a stake) in the activities or outcomes of a substance abuse program.
Statistical Significance	A term that defines the probability that an observed outcome can occur by chance alone. The smaller the chance (probability), the more likely the effect obtained can be attributed to the program. Statistical significance need not translate directly to practical significance.
Strategic Planning	A disciplined and focused effort to produce decisions and activities to guide the successful implementation of a program.
Subjectivity	Said to exist when the phenomena of interest is described, discussed, or interpreted in personal terms, related to one's attitudes, beliefs, or opinions.
Survey Data	Information collected from specially designed instruments that provide data about the feelings, attitudes, and/or behaviors, usually of individuals.
Sustainability	The continuation of a program over a period of time, especially after grant monies disappear.

Target Population	In this publication, the people whose attitudes, knowledge, skills, risk/protective factors, and behaviors are to be strengthened or changed. Also known in the field as the target group, the population of interest, or intended audience.
Technical Capacity	Specialized skills or specific expertise required for program implementation and sustainability.
Theory of Change	As used in this publication, a set of related assumptions (also called hypotheses) about how and why desired change is most likely to occur as a result of a program. Typically, the theory of change is based on past research or existing theories of human behavior and development. Alternatively, a theory of change can be described as a pathway to change that systematically links actions to expectations or intended results.
Underlying Factors	Behaviors, attitudes, conditions, or events that cause, influence, or predispose an individual to resist or become involved in problem behavior, in this case, substance abuse. See Risk Factors and Protective Factors.
Validity	The extent to which a measure of a particular construct/concept actually measures what it purports to measure (e.g., Is “years of schooling” a valid measure of education?).

How to obtain this document:

This document can be obtained online at Internet sites sponsored by the Federal Center for Substance Abuse Prevention (CSAP):

CSAP Decision Support System (DSS) Web site:
www.preventiondss.org

CSAP Model Programs Web site:
www.modelprograms.samhsa.gov/

CSAP Prevention Pathways Web site:
www.samhsa.gov/preventionpathways/

ACCOUNTABILITY

Establish Systems to Ensure Program Performance, Measurement, and Accountability

CSAP Center for Substance Abuse Prevention
SAMHSA
Substance Abuse and Mental Health Services Administration